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ABSTRACT

The study reported here developed and implemented a training program designed to provide future K-12 media specialists with the technical expertise to utilize the Internet. The six modules of instruction which were developed for an education class at the College of St. Scholastica in Duluth, Minnesota, included videos, lesson notes, transparencies, examples of software, and exercises. Each module covers a different aspect of the Internet and contains two hours of classroom activities. The first module covers IBM computer basics, introduction to networking, and the Internet; the second module covers WAIS, WWW, Gopher, Veronica, Archie, and file and software types; the third module covers finding and transferring files, FTP, and commercial vendors; the fourth module covers other resources on the Internet including library catalogs, graphic images, and Internet Hunts; the fifth module covers ethics, copyrights, dangers, and games; and the sixth module brings the information from all six modules together. A concluding chapter presents observations on the implementation of the project in the following areas: participants, technical problems, techniques, time, general observations, and implications for future study. Appended copies of the course syllabus and the modules make up a large part of this document. (Contains 25 references.) (JLB)

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# AN INTRODUCTION TO THE INTERNET: A TRAINING PROGRAM

By

Diana L. Johnson

A Master's Project
Submitted in Partial Fulfillment of
the Requirements for the
Master of Education Degree

The College of St. Scholastica
Duluth, Minnesota
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# Table of Contents

Acknowledgements . . . . . . . . . . . . . . . . . . . . . . . . . . 2

Chapter 1
- Introduction . . . . . . . . . . . . . . . . . . . . . . . . . . 4
- Background . . . . . . . . . . . . . . . . . . . . . . . . . 4-5
- Purpose . . . . . . . . . . . . . . . . . . . . . . . . . . . 6
- Significance . . . . . . . . . . . . . . . . . . . . . . . . 6-7
- Nature of the Study . . . . . . . . . . . . . . . . . . . . . 7
- Assumptions . . . . . . . . . . . . . . . . . . . . . . . . . 7
- Scope and Limitations . . . . . . . . . . . . . . . . . . . . 8
- Definition of Terms . . . . . . . . . . . . . . . . . . . . . 9

Chapter 2
- Literature Review Plan . . . . . . . . . . . . . . . . . . . 10
- The Origins of the Internet . . . . . . . . . . . . . . . . 10-11
- Growth of the Internet . . . . . . . . . . . . . . . . . . 11-12
- The Internet and the K-12 Community . . . . . . . . 12-15
- Training Needs . . . . . . . . . . . . . . . . . . . . . . 15-17
- Uses of the Internet in the K-12 Classroom . . . . 17-20
- Dangers of the Internet to the K-12 Community . 21-22
- Summary . . . . . . . . . . . . . . . . . . . . . . . . . . . 23

Chapter 3
- Procedure . . . . . . . . . . . . . . . . . . . . . . . . . 24-25

Chapter 4
- Summary . . . . . . . . . . . . . . . . . . . . . . . . . . . 26
- Conclusions . . . . . . . . . . . . . . . . . . . . . . . . 26-30
- Implications for Future Study . . . . . . . . . . . . . . . 31

Appendices
- A Syllabus . . . . . . . . . . . . . . . . . . . . . . . . 32-38
- B Module #1 . . . . . . . . . . . . . . . . . . . . . . . 39-60
- C Module #2 . . . . . . . . . . . . . . . . . . . . . . . 61-74
- D Module #3 . . . . . . . . . . . . . . . . . . . . . . 75-103
- E Module #4 . . . . . . . . . . . . . . . . . . . . . 104-115
- F Module #5 . . . . . . . . . . . . . . . . . . . . . 116-123
- G Module #6 . . . . . . . . . . . . . . . . . . . . . 124-136

References . . . . . . . . . . . . . . . . . . . . . . . . 137-138

## Chapter 1

## Introduction

The Internet offers resources to teachers that have never before been available. The Internet is a "network of computer networks" that spans the globe. Access to the Internet can give a school access to the world. Laquey (1993) quotes Patsy Lanclos, an Internet trainer, as stating the following:

> ...I think one of the greatest things I have seen regarding ...the Internet is the enthusiasm it has put back into teachers. Teachers who were tired and worn have suddenly been retread and are ready to roll! They are out there creating new and innovative lessons incorporating telecommunications of all kinds. They are taking risks. (p. 17)

The Internet can be very complex and includes many different software tools. Teachers and Media Generalists need training to develop the skills needed to use the Internet and its resources.

### Background

Our society has become a global one. Education can be enhanced by exposing students to what the world has to offer: different cultures, scientists and research, NASA and space exploration, the Smithsonian gallery, earthquake information, travel advisories, and library catalogs around the world are just a few examples of what could be made available to students.

The Internet is a collection of interconnected networks, all of which can communicate with each other. Presently there are over 15 million people who use the Internet on more than 1 million connected machines. The Internet is presently growing at a rate of over 1 million people a month (Carlitz, 1993).

Access to the Internet is now available to the K-12 community. This wonderful resource allows teachers to expand their classroom to include the entire world. Access to the Internet can allow for the following:

- science classes can communicate with research scientists
- language classes can communicate with classes from other areas of the world
- social studies students can send e-mail to the White House
- students have access to online encyclopedias and graphic images
- literature classes can receive the latest book reviews
- students can download free software
- the school library has access to library catalogs around the world including the Library of Congress
- students can read the latest Supreme Court rulings
- current weather information and maps are right at students' fingertips
- music classes can access the lyrics to almost every song written
- teachers can exchange lesson plans with teachers from other countries
- administrators can get the latest grant and funding information

Each school will need a leader to take advantage of the vast resources of the Internet. The Media Generalist is the logical person to take on this new responsibility. The Generalist will have to take a leading role in implementing access to the Internet. Teachers, administrators, students, and the community will have to be trained and informed. This technology could dramatically change the way we view education and the way students learn.

## Purpose

The purpose of this study was to develop and implement an Internet training program for future Media Generalists. The training program provided future K-12 Media Generalists with the technical expertise to utilize the Internet to its fullest.

## Significance

"By the year 2000, there may be more high school students on the Internet than the total number of people of all ages who went online in 1993" (Strangelove, 1993, September, p.18). "The Internet is the sum total of us all, and it may well be the foundation of tomorrow's education system" (Strangelove, 1993, September p. 22).

If the Internet is to be used effectively in the classroom, teachers and Media Generalists need to have the skills necessary to lead students through the global resources of the Internet. The Internet can be quite overwhelming to the new user. Tennant (1993) reports the following:

> ...personal computer software is still amazingly crude, and online catalogs are still not nearly as easy to use or as helpful as one might wish. So it is with the Internet. Much of the network access software is downright savage, and effective navigational tools are still largely nonexistent. (p. vii)

The Internet is a resource we can use to turn education into an exciting life experience. Teachers and Media Generalists must learn to change their teaching styles and techniques to include a "global" classroom. Eisenberg and Ely (1993) state that "It is essential that all schools have access to computer and networking resources...those without such resources will fall further and further behind" (p. 9). Strangelove quotes the following from a report from the Electronic Frontier Foundation: "The Internet holds exciting potential as an engine for educational reform because it can deliver a wealth of resources to schools across the country..." (p. 22).

## Nature of the Study

This action research project was to develop a set of six modules of instruction. Each module covers a different area of the Internet and contains two hours of classroom activities. The following topics are covered in the modules: introduction to the PC, introduction to networking, what is the Internet?, electronic mail, discussion groups, finding and transferring files, Telnet (remote login), Gopher, Veronica, Archie, WAIS (Wide-Area Information Servers), WWW (World Wide Web), FTP (file transfer protocol), library catalogs, copyrights, and ethics. This study was action research.

## Assumptions

1. EDM537 (online database searching) is the appropriate class in which to teach Internet use.

2. Six weekly class sessions is the appropriate time frame for instruction on the Internet.

3. Instruction on the Internet should be done in a "hands on" fashion with each student having access to a computer.

4. Use of the Internet can be important to K-12 education.

5. Media Generalists need Internet education to be able to support other teachers and students.

## Scope and Limitations

The majority of students in EDM537 are future Media Generalists. The class consists of 10-12 students. This small number enables giving each student personalized attention. Instruction on the Internet is done in small groups because of the availability of computers.

Students first learn the operations of an unfamiliar computer. Students use IBM compatible computers with a mouse. Education majors are not required to take a computer class, so it is possible that this is the first time students have worked on IBM compatible computers. Use of the Internet assumes some computer knowledge: language, file types, hard drive and diskette management, word processing and keyboarding skills, and mouse handling. Some of the tools that are used on the Internet can be very technically oriented. The students must know the basics of the computer before they can receive instruction on the Internet.

Macintosh versions of the software is discussed briefly, but since the equipment in the labs is limited to IBM compatibles, that is what the students use. Although the majority of the students will be using Macintosh computers when they enter the public schools, the DOS Internet skills they acquire will be easily transferable.

The Internet and its tools are all fairly new. The Internet relies on many computers. Computers occasionally malfunction, and not all the resources on the Internet are available all the time. Resources also change on a daily basis so a resource you use today may not be there tomorrow, and new ones are continually emerging.

These training modules do not go into detail about how all the Internet technology works. They also do not cover how to set up a network or how to gain access to the Internet. They concentrate more on what to do with the Internet once you get access.

## Definition of Terms

Archie:

Allows you to search for software or other files that are available on the Internet. It is a searchable database that is an index of the available files on every computer that Archie has access to (Gibbs & Smith, 1993).

E-mail:

Electronic Mail; allows people to communicate with one another over telecommunication lines.

Gopher:

A menu based program that allows you to locate Internet resources without knowing their addresses.

Internet:

A global network of networks. A collection of networks that contains over a million computers and 15 million users.

Telnet:

A remote login function that allow a network user to connect to a remote computer and use it as if the local computer were a terminal of the remote machine (Tennant, 1993).

Veronica:

Searches menus of the Gophers of the world for information.

WAIS:

Wide-Area Information Servers; allows you to search for information in databases across the Internet.

## Chapter 2

## Literature Search

### Literature Review Plan

A review of the literature was conducted through the use of database searches. The following key words and phrases were used for the searches: Internet, training, education, and K-12. Sources that were included were PALS, ERIC, ARCHIE, VERONICA, WAIS, Gopher, and Internet discussion groups.

The purpose of this literature search was three fold: to obtain some background information on the Internet, to obtain information on the need for training, and to obtain information on how the Internet is currently being used by the K-12 community.

There was an abundance of material on this subject especially online over the Internet.

### The Origins of the Internet

The Internet started in 1969 as a single network called ARPANET (Advanced Research Projects Agency Network). This single network was designed by the Department of Defense to allow researchers to share hardware and software located at distant computer centers (Dyrli, 1993; Laquey, 1993; Smith and Gibbs, 1993). Gore (1993) notes that ARPANET was used primarily by a few thousand computer scientists to access computers, share computer files, and send electronic mail. The name of the network was later changed to DARPA Internet (Defense Advanced Research Projects Agency Internetwork) and later shortened to "the Internet" (Dyrli, 1993; Laquey, 1993; Smith and Gibbs, 1993).

Dyrli (1993) reports that networks developed in the 1970s and 1980s found it beneficial to connect to the Internet to share its resources. By 1990 ARPANET had been replaced by the new National Science Foundation Network (Dyrli, 1993; Laquey, 1993). Dyrli states that the NSFNET operates as a high-speed "backbone" for the Internet. This backbone has the ability to transmit data at a rate of 5,000 pages of text per second. Gore (1993) concludes the following:

> today, scientists, engineers, teachers, students, librarians, doctors, businesspeople, and even a few members of Congress rely on the Internet and other networks to communicate with their colleagues, receive electronic journals, access bulletin boards, log onto databases, and use remote computers and other equipment....Today, the network connects not only the top research laboratories and universities but also small colleges, small businesses, libraries, and high schools throughout the country. (p. v)

## Growth of the Internet

Sources seem to disagree on the number of current users and current computers on the Internet. Dyrli (1993) states that the Internet consists of over 5,000 connected networks extending to all seven continents. He also reports that between five and ten million people use the Internet directly. Smith and Gibbs (1993) report that the Internet connects about a million computers and tens of millions of users. NASA (1993) reports that the Internet consists of more than 10,000 interconnected computer networks consisting of 1.5 million computers and 10 million users. Aboba (1993) reports that "As of August 1993, more than 2 million hosts were connected on 15,000 networks in more than 60 countries, with an estimated 5 to 15 million users. The network is estimated to be doubling in users, networks, and hosts annually" (p. 103). Kaul (1993) states that in 1981 only 213 computers were hooked to the Internet and now there is an estimated two and a half million computers on the network with 20 million users. Strangelove (1993, October) reports that the Internet connects more than 38,000 computer networks, 135 countries, and ten to twenty million people. He predicts that by 1998, 100 million people will be exchanging e-mail through the Internet.

"The Internet is the fastest growing system of human communication in history. It is growing faster than the spread of writing, faster than the emergence of the printing press, the telephone, television, or facsimile" (Bosley, 1993, p. 8). Strangelove (1993) concludes:

> Soon, the Internet will take its place within the storehouse of the common knowledge of modern life. Along side other unremarkable items such as the television, telephone, facsimile, VCR and microwave oven, the mystery that is the Internet will be explained, accepted, adopted, embraced, and finally integrated into the architecture of the mundane. But for now, it's all just a little too weird. (1993, October, p. 28)

"Today, the Internet is a web of different, intercommunicating networks funded by both commercial and government organizations" (Smith and Gibbs, 1993). They also state that about 1,000 more computers join the Internet each day. Gore (1993) reports that according to some recent estimates, the amount of traffic on the Internet is increasing at a rate of 10 percent per month.

Even though sources disagree on the exact number of people and computers on the Internet, they all come to the conclusion that it is huge and growing daily.

## The Internet and the K-12 Community

Hahn and Stout (1994) state the following on the importance of the Internet:

> The Internet is, by far, the greatest and most significant achievement in the history of mankind. What? Am I saying that the Internet is more impressive than the pyramids?

> More beautiful than Michelangelo's David? More important to mankind than the wondrous inventions of the industrial revolution? Yes, yes and yes. (p. xix)

"By the year 2000, there may be more high school students on the Internet than the total number of people of all ages who went online in 1993" (Strangelove, 1993, September, p.18). "The Internet is the sum total of us all, and it may well be the foundation of tomorrow's education system" (Strangelove, 1993, September p. 22).

Dyrli (1993) states that there are an estimated 50,000 teachers currently on the Internet and interest is increasing rapidly. He states that according to a 1993 survey published by the Bank Street College of Education in New York City, the major reasons teachers get involved with the Internet are to expand student awareness about the world, to strengthen students' inquiry-based analytical skills, to communicate with other educators, and to eliminate professional isolation.

A respondent of Al Gore's (1994) electronic town meeting asked the Vice President where he sees the Information Super Highway having the greatest impact. The Vice President responded "Schools. Classrooms. At-home learning" (p. 3).

NASA (1993) states that the Internet expands the classroom resources dramatically. "Access to these resources can yield individual and group projects, collaboration, curriculum materials, and idea sharing not found in schools without Internet access" (NASA, 1993, p. 4). NASA concludes that on the Internet class, race, ability, and disability are unseen. This makes it a natural for addressing the needs of all students. (NASA, 1993)

According to Eisenberg and Ely (1993) computer networking can change teaching and learning dramatically. "Teachers and students with access to a computer, a modem, and phone lines are freed from the constraints of space (the physical limits of the school building) and time (the typical 8 a.m. to 3 p.m. school day)" (p.2). They go on to report that interaction through networks helps break down the communication barriers and inhibitions that stifle open exchange of ideas in the traditional classroom. "The very act of using the networks for communication, learning, and information exchange makes students more likely to succeed in the rich technological and information environment of the future" (p. 3).

Smith and Gibbs (1993) notes that the Internet is a fantastic educational resource for both students and teachers. They report that "children quickly learn how to use the Internet, and seeing a 12-year-old navigate between databases all around the world with complete confidence and knowledge is very impressive" (p. 16).

Alexander (1993) interviewed Connie Stout, director of the Texas Education Network, a state-funded computer system linking together virtually all 1,100 Texas school districts and their 7,000 schools. "It really is the beginning of a new approach to learning," says Stout. "Our teachers are saying [the network] has revitalized their teaching," she adds (Alexander, 1993, p. R17). Alexander goes on to state that this network connects Texas students with schools nationwide, enabling student groups to research the deficit, the environment and other subjects jointly. She states that students get added motivation and excitement from these projects because they have real audiences for their work. Alexander adds that teachers are also excited about the Internet. Teachers in rural schools find that the Internet gives their otherwise isolated school access to a county judge, university professor or up-to-the minute news wire. Tiny school libraries are linked to the Library of Congress and other information sources.

Alexander (1993) points out that while educators applaud the coming of networks to primary and secondary schools, researchers say only a small percentage of schools nationwide are using the technology. She reports that cost is the biggest obstacle. Hardware and software is very expensive and schools have tight budgets. Some networks also require on-line fees and telephone charges. Regardless of the expense she states that many educators are convinced the new technology is so useful that it will spread somehow.

**Training Needs**

Laquey (1993) notes:

> if you want to stay current in the nineties, and even into the next century, you need to learn about the Internet..Whether you want to find the latest financial news, browse through library catalogs, trace your genealogy, exchange information with your colleagues, or join in lively political debate, the Internet is the tool that will take you beyond phones, faxes, and isolated computers to the real electronic information frontier. (p. vii)

Krol (1993) reports the problem of learning the Internet as simple as where do you start? He states the following:

> Getting a handle on the Internet is a lot like grabbing a handful of Jello - the more firm you think your grasp is, the more oozes down your arm. You don't need to deal with Jello in this manner to eat it, you just need the right tool: a spoon....The same is true of the Internet. You don't need to be an expert in telephone lines, data communications, and network protocols for it to be useful...You just need to know how to use some tools, and to start working with them. (p. xx)

Honey's report (1993) indicates that the technologically knowledgeable computer and library media specialists are the people taking the lead for telecommunications activities, serving as resource people and facilitators for colleagues in their schools.

NASA (1993) reports:

> The elementary and secondary school community of teachers, media specialists, administrators, and students is a growing population on the Internet. In general, this group of users approaches the Internet with less experience in data network technology and fewer technical and user support resources than other Internet user groups.. It is important to remember that the Internet is a volatile and changing virtual environment. (p.2)

Fryxell (1993) quotes Paula Reinman, director of Pacific Bell's Knowledge Network Project as stating; "The students catch on in three seconds. It takes longer to train the teachers" (Fryxell, 1993, p.26).

The following is reported by Tennant (1993):

> The promise of the Internet and the developing set of tools that allow us to access and navigate Internet resources also challenge us with the need for a massive training and retraining program for library and information professionals, as well as a more broadly based program for the general user community... personal computer software is still amazingly crude, and online catalogs are still not nearly as easy to use or as helpful as one might wish. So it is with the Internet. Much of the network access software is downright savage, and effective navigational tools are still largely nonexistent. (p.vii)

Kehoe (1993) identifies the largest problem that people face when they first use the network is grasping all that is available. He states that even experienced users are surprised when they discover a new feature that they didn't know existed. He concludes "once acquainted with the terminology and sufficiently comfortable with making occasional mistakes, the learning process will drastically speed up" (p. 1).

Hahn and Stout (1994) state the following:

> The Internet is easy to use, but is difficult to learn...The Internet is not for nerds, but just as surely it is not for dummies: it is for those people who are willing to think and to learn...To use the Internet, you will have to expend some time and some effort. (p. xx)

**Uses of the Internet in the K-12 Classroom**

Bishop (1991) tells us that the education and library communities are continuing to expand their use of electronic networks. She continues by reporting the following:

> Researchers, students, librarians, and educators subscribe to electronic conferences, newsletters, and journals on a wide range of topics of concern to them in their work. They use electronic mail to communicate with remote colleagues; file transfer to acquire a variety of public domain information resources, such as software and full-text files; and remote login to access supercomputers. (p. 2)

In Strangelove's (1993, September) article he tells us that the Internet is not just a giant Nintendo game. He tells us about the following educational activities that have been done in the K-12 community over the Internet:

> KIDLINK is a network project that has brought together 2,700 children from ages 10-15 in more than 31 countries. Children from around the world discuss with each other how to make the world a better place. Children in Israel used KIDLINK to tell their peers about the Gulf War while it was happening. A teacher at a middle school in Florida is using the Internet to enable her 7th-8th graders obtain information on AIDS and the HIV virus. An Ohio physics teacher has her students share their lab assignments with students in California. This physics teacher also uses the Internet to have university professors to answer questions. An Ohio Spanish teacher is having her students communicate in Spanish with native Spanish speaking students around the world. This schools library media teacher shows students how to search university libraries for resources over the Internet.

Smith and Gibbs (1993) reported that during the collapse of the Soviet Union in 1991, teenage students in California communicated with students in Moscow. They concluded that "...the educational impact on the students was immense. Rather than learning what was happening in the abstract through television news, they were talking on a daily basis with their peers in Russia who were living the events" (p. 18). . . .

The following K-12 activities are cited by David Fryxell (1993):

> Fifth graders in Moscow have become friends with fifth graders in Mississippi. The National Geographic Kids Network has linked fourth through sixth-grade students in for than 10,000 classes in all 50 states and two-dozen countries to experience scientific method first hand. They weigh trash, monitor water pollution, build solar collectors, and build online friendships.

Fryxell (1993) goes on to explain The National Geographic Kids Network. This network teams geographically dispersed classrooms to do experiments about solar energy, acid rain, weather, nutrition and recycling. This program's goal is to teach kids the scientific method. George Peterson, director of educational media for the National Geographic Society states, "It brings thousands of students together, working as real scientists do - asking questions, developing hypotheses, collecting information and drawing conclusions form data that are all their own" (p. 27). According to Fryxell, in a high school in Brea, California, students have tapped the CIA World Factbook for up-to-date geography lessons, logged onto the Cleveland Freenet, and linked up to the Jet Propulsion Laboratory. English classes have collaborated with other schools in online storywriting.

Making Connections article (1993) explores how elementary students in Maryland are using the Internet with the following activities:

> These young students compare customs in different lands including Tasmania, Peru England, and Iceland. Fifth graders learned the metric system on the Internet when they compared heights and weights with students from around the world. The middle school in Oak, California is 45 minutes away from the nearest library. With the Internet this school is able to get resources and communicate with students from around the world. A middle school teacher tells us that many of the students can't even afford to travel out of the area, but they know what kids from around the world are thinking. High school students in Raleigh, North Carolina have given advice to Russian business students on how to prepare for, open, and operate a small business. The Making Connections article (1993) states that there's little money for field trips at

E.M. Pease Middle School in San Antonio, Texas, so science teacher Linda Maston figures, "If I can't take kids out to the world, I have to bring the world in to them" (Making Connections, 1993). According to the author, students do science experiments and compare results with students from around the world. For the students at the Florida School for the Deaf and the Blind the Internet means access to the world. John-Mark Leach, Computer Resource Coordinator, explains, "With telecommunications, blind children have the same access to information as their sighted peers. The newest information is always in print, and blind students usually have to rely on someone else to read it to them. Telecommunications changes this limitation" (Making Connections, 1993, p. 36). The students use speech synthesizers or a Braille printer to obtain the information.

Lee Bloomquist's (1993) article is about a high school in Virginia, Minnesota. In the Virginia High School, German students are communicating to other students in Germany. Instead of mailing a letter, which may take seven days to get to Germany, the Internet delivers the students messages in seconds. Becky Waterhouse, German instructor states "The classic problem in teaching a language is that as the years go by interest wanes. But with this, the turnaround time for the messages is minutes" (p.2B). A Virginia German student says they were just learning the basics before, but now they are communicating with real German people.

NASA (1993) gives the following examples of Internet classroom activities:

> Internet poetry contest from around the world, collect data on monarch butterflies and send to a national point, participate in a national simulated space shuttle mission, or participate in worldwide math and science experiments. (pp. 31-35)

## Dangers of the Internet to the K-12 Community

"The Internet is not a sterile playground, amusement park or library, but a complex, multi-cultural world that includes international industrial spies, common garden-variety hackers, hate mongers, binary pornography, subversive political literature, and 'illegal' information concerning explosives, firearms, and the great satan of the 90's--drugs" (Strangelove, 1993, September p. 21). Strangelove continues by reporting that the legal liability question of providing Internet access will have to be answered. The Internet can deliver a wealth of resources, allow sharing between schools, and foster intellectual curiosity, but the lack of a well defined legal framework has created uncertainty among some. Schwartz (1993) reports:

> Genevieve Kazdin, a self-appointed crossing guard on the information highway, remembered the day last September when she found an eight year-old girl attempting computer conversations with a group of transvestites. Seemingly safe at home, the child was playing with her favorite $2,000 toy, using her computer and modem to make new friends through a service called America Online. The name of the electronic discussion group the girl had discovered was called, confusingly enough, 'TV chat' -- the TV being shorthand for transvestite. Kazdin said the girl had read it differently: 'She was thinking in all innocence, "We're going to talk about Barney". (p. 2)

Schwartz continues by stating that users are exposed to an astonishing variety of information, including some of the raunchier aspects of human life. Schwartz gives the following examples of possible perils to children on the net: cybersex - sexually explicit fantasy scenarios back and forth, downloaded erotic-photos to display on computer screens, discussions about bomb-making, and how to steal credit card numbers.

NASA (1993) states that there are files on the Internet that parents would not like their children to get and if the school has full Internet access these students technically can not be kept from accessing this objectionable material. NASA continues by reporting that schools should develop clear policies to guide the students on use of the Internet. The only way to have control is to limit some access. NASA states "You will have to decide whether it is worth limiting access to ensure a measure of technical control. Some find that it is well worth it and others do not" (p. 12).

Viruses are another security problem when you use the Internet. NASA (1993) reports that it is not a problem when you exchange data, but only when you download a computer program and run it on your computer are you in danger. Any program you download could have a virus. NASA states that all computers should have virus protection software.

Caruso (1993) found some additional difficulties with the Internet. She states that trying to take advantage of today's information services is likely to be disappointing. She adds that frustrations such as slowness, lack of participation, technical difficulty, cost, software bugs, and the possibility of loosing an entire file can make the Internet less than desirable. Caruso also states that people change their habits slowly.

## Summary

This chapter presented a review of the current literature on three areas of the Internet: background information, training needs information, and information on the Internet and the K-12 community.

The sources are in agreement as to how and when the Internet started. They do not agree as to how large it is or how fast it is growing. Sources also agree that training is needed to learn the tools of the Internet. Sources indicate that the Internet is already being used in some classrooms very extensively and effectively. Some sources state that there are some dangers to K-12 students on the Internet, but all sources agree that the Internet can play a major role in our education system. "The Internet is the sum total of us all, and it may well be the foundation of tomorrow's education system" (Strangelove, 1993, September p. 22).

## Chapter 3

## Procedure

The population for this study is EDM537 students (future Media Generalists) at The College of St. Scholastica, Duluth, Minnesota. Most of the students are either secondary or elementary education majors with an educational media licensure. The technical experience and skills vary among students. Instruction for the first part of the Spring quarter is concentrated on the Internet. The last part of the quarter consists of instruction on the Dialog search service.

Each of the students have a computer to use during the class sessions. The computer labs are also available to them at other times. Each student has his/her own Internet login ID.

The classes meet once a week for 3 hours for 10 weeks. The first six weeks are dedicated to the Internet and electronic mail. The last four sessions are dedicated to the Dialog search service. The course is team-taught by Dr. Margaret Scheibe and me. The Internet class sessions consist of presentations, demonstrations, videos, hands on exercises, group exercises, and discussion.

The initial introduction is informal with each student becoming comfortable with the IBM compatible computer. Students learn diskette and file handling, printing, and logging onto The College of St. Scholastica networks. After the students have an understanding of the basics of the computer, they then start with instruction on the Internet.

Please refer to Appendix A for the course syllabus. Requirements for the course will be: a weekly journal, current research reviews, class team projects, designing learning experiences, and designing lesson plans. Students will read their Internet mail every class. I will be sending and forwarding them relevant mail.

The first module of instruction (see Appendix B) covers IBM computer basics, introduction to networking, definition of the Internet, what is available on the Internet, how to find e-mail addresses, discussion groups, Telnet, talk, capture, levels of Internet access, completing a Macintosh computer tutorial, and viewing a video done by U.S. West.

The second module of instruction (see Appendix C) covers WAIS, WWW, Gopher, Veronica, Archie, file types, software types, and viewing a video done by NASA.

The third module of instruction (see Appendix D) contains finding and transferring files, FTP, commercial providers, America Online, Prodigy, Compuserve, and viewing a video from Prodigy. Demo accounts and a modem is set up in the labs so students can have hands on experience with these services.

The fourth module of instruction (see Appendix E) covers other resources on the Internet, library catalogs, graphic images, Internet hunts, funding, grants, and viewing a video on technology for education.

The fifth module (see Appendix F) contains policies, plans, ethics, copyrights, dangers, games, and viewing a video about copyrights on software. Students will also start sharing their learning experiences. Please see Appendix A for course syllabus.

The sixth module (see Appendix G) brings all the information from the quarter together. Students share their learning experiences and lesson plans with each other.

# Chapter 4

## Summary

The purpose of this project was to prepare six modules of instruction on the introduction to the Internet for students in EDM437/537. A search of the literature was done and this information was used as a guide in writing the instruction modules. The modules consist of videos, lesson notes, transparencies, example software, and exercises. Six weekly classes were taught using these modules of instruction.

## Conclusions

### Participants

There were 11 students in the class. Four students were student teaching, three were employed as media generalists in schools, one was a school principal, one was a St. Scholastica faculty member, and two were St. Scholastica staff members. Although the students had a variety of backgrounds, they all had one thing in common; an interest in education and how the Internet can be used in education.

Students in this class had a wide variety of computer expertise. Some had never seen an IBM compatible computer before, while others had spent years on one. Although it would have made the class go smoother if all students had had computer experience, it posed few problems.

### Technical Problems

The biggest problem on the first two sessions was logging onto the two St. Scholastica computer networks. It was confusing to students to have two login IDs and passwords, but after a few weeks they picked up on it. They began to realize that if they wanted to print on the laser printers they needed to log into the local area network before they used the Internet.

We only encountered hardware problems one night. The Internet server was overloaded and it made the students' computers freeze. It was easily corrected by simply rebooting the computers, but irritated the students. The other technical problem that we encountered was students' diskettes becoming full. The software and image files that were downloaded were large and students' disks would fill quickly. If I teach this class again I will require the students to purchase four high density three and a half inch disks rather than just two.

### Techniques

Some of my techniques changed during the teaching of the six modules of instruction. I started out using transparencies, but found them clumsy because I would have to remove the LCD display before I could use the overhead. I then started to create GIF (graphical interchange format) files and used a gif viewer along with network broadcast software. This would allow me to make my slides appear on the computer in front of the students. The students seemed to respond to this method better. I then started using different software (Harvard Graphics for Windows) that allowed me to create slide shows so I didn't have to use a gif viewer. This was the most convenient method and the students responded very well. It seemed to personalize the instruction when the students were able to view the slide on the screen in front of them.

The students also responded very well to the method of having the search demonstrated to them before they did it themselves. I would again use the network broadcast software that would project my screen onto every student's computer. They were able to see exactly what I was typing right in front of them. I demonstrated the search step-by-step so there were no surprises when they did the search. I felt that this again personalized the instruction.

After my "lecture" I would give the students a step-by-step guide to search for a specific item. The experienced computer users took these guides and immediately dove into the Internet. On just the second night there were three users already retrieving lesson plans from Cleveland and searching for jobs around the world. The beginning computer users needed a little coaxing and coaching. All students seemed to get a sense of accomplishment when they completed the searches. I tried to make the searches like searching for treasures. I tried to have them find things that they could take with them and use. It was wonderful to see the smiles on their faces when they would retrieve something from a far away place and use it on the computer in front of them.

Students grasped the POPMAIL software quickly and would come to class early just to read their Internet mail. I had the students join an e-mail discussion group. This created a lot of mail for them to read. The students that didn't have access to the Internet throughout the week were a little overwhelmed with mail, but the students that read their mail during the week seemed to enjoy it.

Students preferred the menu driven Gopher. This seemed to be the tool of choice for the beginning computer users. They felt comfortable with the menus and liked not having to know technical language. The more experienced computers users attempted Archie and FTP, but also seemed to prefer a menu-driven search tool.

I had an advantage teaching in this computer lab because I knew the technology very well. I knew how to use the network broadcast software, the Internet capture and print, and other network capabilities. I felt extremely comfortable with teaching in this room.

### Time

It was difficult to teach this class just one night a week. The students that didn't have access to the Internet during the week were at a disadvantage. They would forget some things from one week to the next. One class a week just didn't seem like enough time for them to develop and retain the skills that they needed. Students commented that they would have liked the class more than just one night a week. The ideal situation would be to teach this class three days a week for shorter time periods. I think the students would then retain more. Although I was able to cover all the topics that I planned, I wasn't able to go into the depth that I would have liked. There just wasn't enough time. This class made it clear that every minute should be spent having the students in front of computers. I don't believe a lecture - lab type setting would work.

Hahn and Stout (1994) state the following:

> The Internet is easy to use, but is difficult to learn... The Internet is not for nerds, but just as surely it is not for dummies: it is for those people who are willing to think and to learn... To use the Internet, you will have to expend some time and some effort. (p. xx)

### General observations

The students always seemed interested and full of questions. Even on the first night the students had questions with the main one being; how can I connect to the St. Scholastica computer from my home or my school. I spent time with each individual that was interested in this. Three students were successful in using their computers from their homes or schools to connect to the Internet through the St. Scholastica computer. These students would communicate through e-mail with me often. They did searching and exploring on their own and became very experienced Internet navigators by taking what we covered each week and testing and experimenting with it. One commented that she didn't seem to get any other work done because she found herself on the Internet until late at night.

Students in EDM437/537 seemed to have enthusiasm that I have not seen in other classes. They were excited to use the Internet and very interested in ways the Internet could effect them directly. Students would come to class early and stay late to use the computers. It would not be uncommon for me to stay an hour after class helping students navigate the Internet. I found this remarkable for a night class because usually students come to the class after teaching and working all day. They are tired and usually ready to go home immediately after class. I enjoyed teaching this class more than any other that I have ever taught. I Think the following quote from Hahn and Stout (1994) sums up my feelings on the importance of the Internet:

> The Internet is, by far, the greatest and most significant achievement in the history of mankind. What? Am I saying that the Internet is more impressive than the pyramids? More beautiful than Michelangelo's David? More important to mankind than the wondrous inventions of the industrial revolution? Yes, yes and yes. (p. xix)

## Implications for Future Study

This project can be used by teachers and media generalists for ideas on Internet instruction. These ideas can be integrated into their classroom regardless of the subject area being taught. Since the Internet is always changing, each module will have to be evaluated before its use. Parts of these modules will be used to develop a 10 hour workshop for K-12 teachers on the Internet.

Following are further research possibilities:

1. Extend this project to include a technical module on how to get connected to the Internet.
2. What impact does it have on the student to have access to the Internet outside of class? (At home or at work)
3. Do students retain more technical knowledge when they have the class three days a week rather than one night a week?
4. Conduct a follow up survey on the students to see if the class helped them in using the Internet when they got a job.
5. Conduct a penpal type match up with existing media generalists and students of EDM437/537.
6. Conduct a penpal type match up with other media students from other media programs around the world.
7. Work with teachers of other education courses to integrate the use of the Internet in their classes. (Methods, Teaching Science, etc.)

# Appendix A

## Course Syllabus

THE COLLEGE OF ST. SCHOLASTICA
Duluth, Minnesota

# ONLINE DATABASE SEARCHING
EDM 437/537
Spring 1994
SYLLABUS

**INSTRUCTORS:** Dr. Margaret Scheibe
Diana Johnson
**OFFICE:** Tower 4104
**PHONE:** 723-6600
**OFFICE HOURS:** Monday 8:00-9:00P, Tues.& Thurs. 12:30-1:30P, by appointment.

**CREDITS:** Three graduate/undergraduate credits

Required Materials:
Lathrop, A. (1989). Online and CD-ROM Databases inSchoolLibraries. Englewood, Colorado: Libraries Unlimited.
Gibbs, M & R. Smith. (1993). Navigating the Internet. Indianapolis: Sams Publishing.
DIALOG Lab Workbook: Online Searching for the Information Professional & Searching Dialog: The Tutorial Guide. Arlington,Va: DIALOG Services, Inc.
Two 3 1/2 inch DS HD diskettes (available at the bookstore)

## GOALS:

*The course, EDM 437/537, meets the following outcomes for licensure as a Media Generalist in the State of Minnesota:*

1. relate the role of media to curriculum development [A5.]
2. discover factors that influence media service and determine their impact. [A7.]
3. examine the relationship of media programs to curriculum development,to emerging technology. [A10.]
4. assess and appraise user needs and interests, existing resources, and projected changes. [C1.]
5. systhesize and convey to media center personnel and users recent educational, technological, and legal developments and trends which affect media programs. [C13.]
6. recognize the levels, formats, and types of media required in designing materials to meet stated curricular objectives. [D2.]
7. identify emerging technologies and the skills which will be needed for their use. [D4.]
8. determine media and technology appropriate for educational programs. [E1.]
9. use reference sources, print and non-print, to meet information needs of students, faculty, and administration. [E4.]
10. expand the resources of the media center by knowledge and utilizaiton of external networking opportunities. [E9.]
11. work with programmed materials, information storage and retrieval systems, computer-assisted instruction, telecommunication, and other emerging trends. [E11.]

12. teach students reserch methods and skills as a foundation for life-long learning. [E14.]
13. recognize the importance of technological advancement to the educational process. [F1.]
14. apply an understanding of the basic concepts, terminology, and application of emerging technology. [F2.]
15. recognize curricular implication that result from emerging technology and educational trends. [F3.]
16. provide leadership in incorporating innovations into education. [F4.]
17. identify sources of information related to technological advancements. [F5.]
18. provide technical advice and service for educational access to technology. [F6.]

## COURSE DESCRIPTION:

This course will provide students with the basic knowledge necessary to conduct computer searches and to administer computer literature searches in public school media centers. Focus is on the search process in the public schools and the integration of database searching in the school curriculum. Additional emphasis is on the teaching of searching as a skill in the public schools. Computer literature search vendors and the Internet will be introduced. Online computer time will be utilized by the students.

## REQUIREMENTS

**1. Weekly Journal:**

Reactions to class discussions, reviews and critiques of articles and readings assigned, and reactions to class presentations and guest presenters should be kept in a loose leaf notebook which I may collect at any time in the quarter. The journal must clearly show reflective thinking on the class discussion, material, and presentation and should include connections to the self as an active practitioner.

**2. Current research reviews.**

You will be expected to review and critique five journal articles that relate to the Internet or online database searching. Each article must be from an academic source and must be of significant depth and breadth. Please reflect on the application of the information in each article to the content and intent of this course.

**3. Team Lab projects:**

Team Lab project will be assigned throughout the quarter in class. These are team projects and will require working with a partner. You will choose your class partner the first evening. While some class time will be assigned to work on the projects, you will need to plan on additional time outside of class to adequately complete these assignments. Please be prepared to do that. You will be expected to evaluate your partner and that evaluation will be factored into the final course grade.

**4. Design learning experiences:**

Design learning experiences relating to online database searching or the Internet that can be integrated into the curriculum. Design instruction sheets, activity sheets, examples, and answer sheets for each experience. Follow the example given in class.

- You are required to do **three**.
- **One** will be presented to the class. You will be expected make a copy for each student in the class. These will be distributed on the day you make your presentation.

**5. LATE PROJECTS WILL NOT BE ACCEPTED UNLESS THE STUDENT HAS RECEIVED PRIOR APPROVAL FROM THE INSTRUCTORS.**

EVALUATION:

Grades will be determined by the following point system:

| | |
|---|---|
| Weekly Journal | 50 points |
| Research Article Reviews | 50 points |
| Class Searches | 50 points |
| Learning Experiences | 60 points |
| Total Points | 210 points |

**Grades:**

| Undergraduate: | Graduate: |
|---|---|
| A = 193-210 points | A = 195-210 |
| B = 173-192 points | B = 177-194 |
| C = 151-172 points | C = 156-176 |
| D = 130-150 points | D = 138-155 |
| F = 129 points and below | F = 137 points and below |

**INCOMPLETES ARE NOT AVAILABLE FOR THIS COURSE. STUDENTS WILL BE ASSIGNED GRADES BASED ON THE QUANTITY AND QUALITY OF WORK COMPLETED BY THE DATE OF THE FINAL EXAM. NO WORK WILL BE ACCEPTED AFTER THE FINAL EXAM.**

BEST COPY AVAILABLE

# EDM 437/537 ONLINE DATABASE SEARCHING
## SPRING 1994

**Day:** Tuesday
**Time:** 5:15 - 7:40
**Room:** T2420

**Instructors:** Scheibe, Johnson
Phone: 723-6600
Office: T4104
Office hours: TBA

**Internet addresses:** mscheibe@css1.css.edu
djohnson@css1.css.edu

**March 8** - Introduction/ Housekeeping

Topics: introduction, housekeeping, general information. Introduction to the computer and computing at CSS, electronic mail, samples of what we will do.

**Assignment:** CSS Network ID request form
Reading and sending mail
Popmail handout

**March 15** - Introduction to the Internet

Topics: More on the PC, introduction to networking, what is the Internet?, what is available, how to find e-mail addresses, discussion groups, Telnet, talk, capture, levels of Internet access.

View in class: Video - US West - Accessing the Internet
Tutorial in class: Macintosh - Internet Cruise

**Assignment:** Reading and sending mail
Telnet sessions
Gibbs - Chapters 1 - 3, 5 and 13
Lathrop - parts 4 & 5
Read your Internet mail

**March 22** - Searching software on the Internet

Topics: WAIS, WWW, Gopher, Veronica, Archie, file types, software types.
View in class: Video - NASA - Global Quest: The Internet in the Classroom

**Assignment:** Class activities
Internet searching for treasures
Gibbs - Chapters 7 - 9
Lathrop - part 6
First research article due-10 pts.
Team search - 10 pts.
Read your Internet mail

**March 29** - More searching software on the Internet

Topics: finding and transferring files, FTP, commercial providers, America Online, Prodigy, Compuserve.
View in class: Video - Prodigy - New Connections

**Assignment:** Class activities
Internet searching for treasures
Gibbs - Chapters 4 and 6
Lathrop - part 7

Team search - 10 pts
Collaborative classroom project with Cedar Creek Elementary School in St. Francis, MN
Read your Internet mail

**April 5** - Other resources on the Internet
Topics: Library catalogs, graphic images, Internet hunts, funding and grants.
View in class: Video - Experience the Power: Network Technology for Educat.

**Assignment:** Class activities
Gibbs - Appendix A
Lathrop - part 8
Second research article due-10 pts.
Read your Internet mail - Cedar Creek Elementary School
Work on learning experiences

**April 12** - Policies and ethics on the Internet
Topics: policies, plans, ethics, copyrights, dangers, games, share learning experiences.
View in class: Video - Don't copy that floppy

**Assignment:** Class activities
Gibbs - Chapter 11
Read your Internet mail
Work on learning experiences

**April 19** - Dialog searching
Topics: logical operators, proximity operators, Dialog commands, choosing the right database.

**Assignment:** Class searching
Assigned reading from Dialog text
Lathrop - part 2
Team search - 10 pts.
Read your Internet mail
First learning experience due-20 pts.

**April 26** - Networking and Dialog
Topics: Popmail, basics of online serching. Different types of databases, planning the search, search worksheets, class activities, truncation, logical operators, thesauruses.

**Assignment:**
Class searching
Assigned reading from Dialog Text
Lathrop - part 1
Team Search - 10 pts.
Third research article due-10 pts.

**May 3** - Advanced Dialog searching, CD-ROM
Topics: Advanced searching techniques, CD-ROM.

**Assignment:** Class searching
Assigned reading from Dialog text
Lathrop - part 3

Team search - 10 pts.
Second learning experience due-20 pts.
Read your Internet mail

**May 10** - Learning experiences and lesson plans
Topics: Group learning experiences and treasure hunts.

**Assignment:** Class activities
Gibbs - Appendix E
Fourth research article due-10 pts.
Final learning experience due - bring copies for everyone in class-20 pts.
Read your Internet mail
Learning experience presentations

**Final Exam** - Date and time to be announced
Fifth research article due-10 pts.
Weekly journal due-50 pts.

# Appendix B

Module of Instruction #1

# Module #1

Introduction / Housekeeping

Introduction, housekeeping, general info, introduction to the computer and computing at CSS, electronic mail, samples of what we will do.

| | |
|---|---|
| Assignments: | CSS Network ID request forms - Novell and Unix<br>Reading and sending mail<br>POPMAIL Handout |

# Housekeeping

**Materials -**

Samples of what we will do - programs, transparencies, sheets
syllabus (copies)
Texts
Lab hour sheets (copies)
Lab brochures (copies)
Survey sheet (copies)

Introductions - me, Maggie, students

Survey students - How many elementary ed majors - How many secondary ed majors (what subject) - others - What do they want to learn in this class -
Hand out **written survey** - return at end of class

Go over **syllabus** - office hours

Show texts

Note about text: - Skip technical stuff - was difficult to find text

Labs at CSS - pass out **lab hour sheets** and **brochures**

Transparency examples of what we will do

Program examples - Gif viewer - educational games

# Intro to computers at CSS

**Materials:**

- 5 1/4" diskette
- 5 1/4" diskette - cut
- 3 1/2" diskette
- 3 1/2" diskette - cut
- 5 1/4" disk drive
- 3 1/2" disk drive
- hard drive
- diskette labels
- write protect labels
- Network request forms (Novell and Unix) (copies)
- CSS Computer Code of Ethics (copies)
- Parts of Computer Handouts (copies)
- Diskette Care Sheet Handout (copies)
- Read Write Head transparency
- Screwdriver
- samples of programs - Smithsonian - NASA
- Laser printer samples - Dot matrix samples
- Dir transparency
- Network IDs - already created - Novell and Unix
- Extra 3 1/2" and 5 1/4" diskettes - one for every student

DOS vs MAC -

Parts of a computer - **Handouts**
  Drives - A - B - C

Diskettes - 2 different sizes - 4 different types - **cut diskettes**
  Capacity - 3 1/2" - 1.4MB, 720K
    5 1/4" - 1.2MB, 360K
  **Diskette care sheet handouts**

Hard Drive - internal - capacity - 20MB - 1 gig

**Diskette labels** - **Write protect tabs** - write protecting 3 1/2"

**Disk Drives and diskettes** - show how they work - how to insert a disk

**Transparency of read/write head dust particle**
When red/green light is on do not remove diskette!

Open computer

take apart printer

Power buttons - turn on computer and monitor

Reset button - warm boot - cold boot

Keyboard - mouse

Handout diskettes - 3 1/2" and 5 1/4"

DOS Prompt

Default drive - changing a: b: c:

Networks - LANS and WANS

Networks at CSS - there are two -

  Local Novell - what is it used for? - printers - lasers - DOT matrix vs. las - **samples**

  Internet - UNIX - what is it used for?

If you want to use a laser printer you must log into the Novell network

You will need two passwords - one for each network

Fill out **ID request forms** and pass out **IDs** - Novell and UNIX
  Go over **Computer Code of Ethics sheets**

Logging onto the networks
  Novell
  Unix
  Changing passwords - have them change both passwords right away
    Novell - setpass
    UNIX - Passwd
    Change to the same password

Samples of what we will do.
  Smithsonian gift viewer - using exac
  Weather maps
  NASA pictures

Formatting a disk - what does formatting do?

DIR - DIR /P

Filenames - transparency of DIR

Directories - CD RD MD
    Current directory

Deleting files

# Electronic Mail

**Materials -**
POPMAIL HANDOUT
Extra 3 1/2 " diskettes and labels

Most widely used Internet service

Text states that each day around 25 million people send each other messages.

Most messages are just text, but you can send programs and pictures.

Client-Server programs - make electronic mail more user friendly - POPMAIL
Written by the University of MN

Printing mail - if you want to print using this program - must first log into Local network
- Can only print from Teagle computers otherwise you must use WP - will go over WP another week
- Choose #1 and log in
- Press C: and enter
- Type cd\menu and enter
- Type menu and enter

EXAC - show mail without popmail to everyone first

EXAC - Show mail using popmail to everyone

You need a 3 1/2" diskette to use popmail in the labs
Insert your 3 1/2" diskette

NOTE: your mail is put on this disk - always use the same diskette for popmail -
Pass out labels - Label the diskette popmail
Please give me a new diskette next week to replace this one

POPMAIL is an option on your menu - choose #6

Mouse use

**POPMAIL handout** - e-mail parts - headers -go over parts

e-mail addresses
- Domain names - highest level
  - EDU Education

| | |
|---|---|
| MIL | Military |
| GOV | Nonmilitary governmental |
| COM | Commercial |
| NET | Special network machines |
| ORG | Other organizations |
| UK | United Kingdom |
| CA | Canada |
| AU | Australia |

Subdomains are names of institutions and departments within those institutions
Example - CSS1.CSS.EDU - computer called CSS1 at CSS and educational
BIGBOPPER.CIS.CSS.EDU - computer called bigbopper in the CIS department at CSS

Computers' names are sometimes colorful like - Maroon - main U
Coyote, cadilac

Usernames - no real pattern - can be numbers or letters
djohnson@css1.css.edu - this is your full e-mail address - write yours down
75600.1002@compuserve.com
Troys address at St. Francis Elementary is 0015cceL@TIES.K12.MN.US

Look at what is on your diskette -
B: - DIR

# Discussion groups and Listservs

**Materials -**
- Book on list of discussion groups
- Textbook - discussion groups in back
- Listserv commands transparancy

Allow people with common interests to have group discussions

A list for every interest - MEMO - Librarians, Media people, Billy Idol, Star Trek, Pets, Rolling Stones.

Allows you to send a message to the Listserv - that computer then sends the message to everyone in the group - they can then respond back to you personally or to the entire group.
    Example - my question about printer in labs - got 30 responses - UK, Australia, all the US.

Subscribing - Always subscribe to the LISTSERV not to the group - whatever messages you send to the group will go to everyone.

The Listserv will notify you of your subscription

Just spend time reading the messages before you reply to get a feel for the group.

Be careful about the content of your reply - depends on the group - some are cruel

Moderated or Unmoderated -

Unmoderated - accepts and distributes all e-mail from anyone registered - you deal with a machine - no person

Moderated - human filters messages to make sure they are appropriate

EXAC - CTRL-ALT-M and CTRL - enter
K:\gifview\vpic
Mark slide #1-6

Listserv commands - **Slide #1**
- SUBSCRIBE
- SIGNOFF
- SET - alter your options
- MAIL - NOMAIL - can suspend mail like in summer
- DIGESTS / INDEX - all messages in one or just index

Can search a Listservs archived messages -

# College of St. Scholastica

## Computer Code of Ethics

As an academic community organized for the purpose of teaching, learning, and research, we the members of that community have responsibilities toward each other regarding computer use as well as toward the computing community outside the College. Respect for intellectual property, privacy of data, integrity of equipment, and in general, recognition of the rights of others is of central importance. Each of us has rights to the use of computing resources and to privacy in our personal work, and each of us depends on everyone else to conduct themselves responsibly.

1. Respect for Intellectual Property:
   It is the College's policy to adhere strictly to the letter and spirit of copyright laws and regulations, including software licensing agreements. Only authorized copying of files or programs or program utilization are ethical and legal.

2. Privacy:
   Database and other computerized information that is either in administrative computers or those of faculty or students is private and must only be accessed or disseminated by or with the permission of the owner or person in charge. Any other accessing, dissemination or tampering is illegal or unethical. Network resources, electronic mail, bulletin board software and all other computing resources are included in this category; inappropriate, rude, malicious or harassing language or activities are also precluded.

3. College Equipment:
   College computing equipment should be handled with the care due to sensitive, expensive, scarce resources. College personnel should be notified whenever the equipment, including software, fails to function normally.

Violation of this Computing Code of Ethics may subject the offender to disciplinary action through the existing structures for faculty, staff and students of the College.

## Novell Network continued

RM Cobol
HyperGraphics
Paradox 4.0
Derive
SPSS
Minitab
HIA Software - Medicus, Code 3, Code Finder

## Laser Printers

Are Available To All Networked Computers.
Laser Printers Are Located In The Main
Computer Lab (Tower Hall).

## Software Available On Diskette

At Computer Labs Located In Tower:

- Typing Tutor
- Chemistry Study Disks
- Print Master
- MedRec II Demo (HIA Students)
- Spanish/French Language Disks

## Eligible CSS Computer Lab User:

Any User Must Have A Current CSS ID Card And Must Be One Of The Following:

1) A College Of St. Scholastica Student.

2) A College Of St. Scholastica Faculty Member.

3) A College Of St. Scholastica Staff Member.

Telnet Address: CSS1.CSS.EDU

There Is Now A Dot Matrix Printer Connected To The Unix System. Check out the one page instruction sheet available.

Computer consultants are on duty all hours the labs are open.

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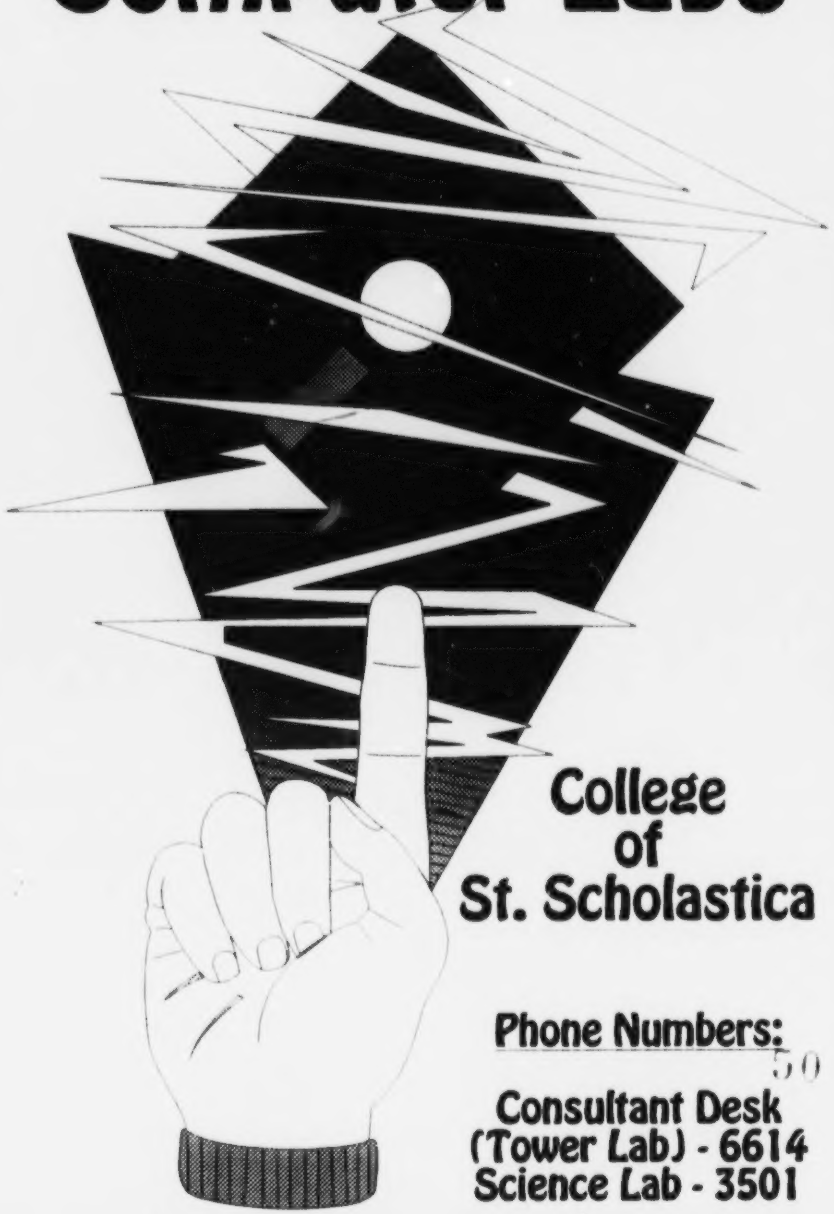
* Computer labs are supported by the Information Services Department.

# Computer Labs



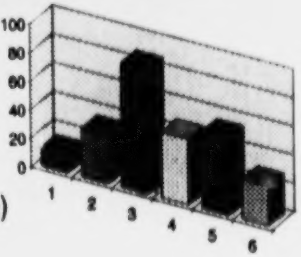
## College
## of
## St. Scholastica

**Phone Numbers:**

**Consultant Desk**
**(Tower Lab) - 6614**
**Science Lab - 3501**

## Micro Lab - Tower 2410

21 Computers IBM Compatible - Novell Network
1 Macintosh Centris 610 (WordPerfect, PageMaker, Gopher)



Also Available:
- Windows 3.1
- SQL For Windows
- Excelerator For Windows
- Nutrition
- Text Magnification
- Corel Draw (CD-ROM and Hard Drive)
- 3 CD-ROM Systems - Laser Library
- PageMaker 4.0
- TractsII - HIA Students
- Object Vision Resume Writer
- Telnet
- Gopher

Dot Matrix Printers Are Available (IBM Compatible)

## Teagle Lab - Tower 2420

24 Computers IBM Compatible - Novell Network

Also Available:
- Windows 3.1
- Telnet
- Gopher

## Apple Lab - Tower 2415

11 Apple IIe's, 1 IIGS        Dot Matrix Printing

Software Available at TA Desk

| | |
|---|---|
| Appleworks | Language Programs |
| Print Shop | Educational Software |

## Systems Lab - Tower 2411

IBM AS/400
10 Computers IBM Compatible - Novell Network

Also Available:
- Windows 3.1
- SQL For Windows

## Systems Lab - Tower 2411 continued

- Telnet
- Gopher

Dot Matrix Printers Available (IBM Compatible)

## Library

10 Computers IBM Compatible - Novell Network

Also Available:
- Windows 3.1
- Telnet
- Gopher

Software on Diskette:
- Spanish (BLC's)

Dot Matrix Printers Available (IBM Compatible)

## Science Lab - S175

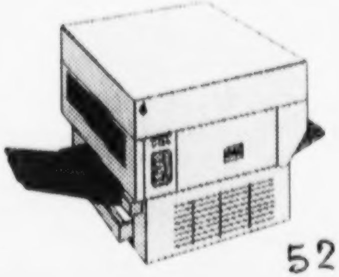
4 Computers IBM Compatible - Novell Network

Also Available:
- Windows 3.1
- Telnet
- Gopher

Dot Matrix Printers Available (IBM Compatible)

## Novell Network

Software Available:
- WordPerfect 5.1
- WordPerfect 5.2 for Windows
- WordPerfect Office Mail
- Grammatic IV
- Grammatic V (Windows Version)
- dBASE IV (Student Version)
- Quattro Pro (Dos Version)
- Quattro Pro (Windows Version)
- Turbo C
- Turbo C++ (Windows Version)
- TC Print



Computer Lab

# 1993-1994
## SPECIAL LAB HOURS TOWER & SCIENCE COMPUTER LABS

Tower 2110, 2411, 2415, 2420
Science 175

### FALL QUARTER:

| | |
|---|---|
| Nov. 20-21 | Closed |
| Nov. 22-24 | Open 8:00a.m. - 4:00p.m. |
| Nov. 25-28 | Closed |

### WINTER QUARTER:

| | |
|---|---|
| Dec. 18-19 | Closed |
| Dec. 20-23 | Open 8:00a.m. - 4:00p.m. |
| Dec. 24-27 | Closed |
| Dec. 28-29 | Open 8:00a.m. - 4:00p.m. |
| Dec. 30 | Open 8:00a.m. - Noon |
| Dec. 31 | Closed |
| Jan. 1-2 | Closed |
| Jan. 17 | Closed |
| Feb. 26-27 | Closed |
| Feb. 28 | Open 8:00a.m. - 4:00p.m. |
| Mar. 1-4 | Open 8:00a.m. - 4:00p.m. |
| Mar. 5-6 | Closed |

### SPRING QUARTER:

| | |
|---|---|
| Mar. 30-31 | Open 8:00a.m. - 4:00p.m. |
| Apr. 1-3 | Closed |

Computer Lab

1993-1994
SPECIAL LAB HOURS TOWER & SCIENCE COMPUTER LABS

Tower 2110, 2411, 2415, 2420
Science 175

FALL QUARTER:

Nov. 20-21 Closed
Nov. 22-24 Open 8:00a.m. - 4:00p.m.
Nov. 25-28 Closed

WINTER QUARTER:

Dec. 18-19 Closed
Dec. 20-23 Open 8:00a.m. - 4:00p.m.
Dec. 24-27 Closed
Dec. 28-29 Open 8:00a.m. - 4:00p.m.
Dec. 30 Open 8:00a.m. - Noon
Dec. 31 Closed

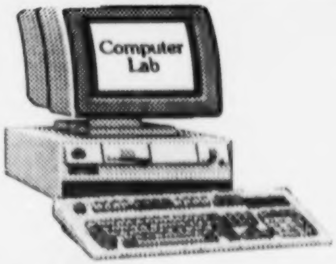
Jan. 1-2 Closed
Jan. 17 Closed

Feb. 26-27 Closed
Feb. 28 Open 8:00a.m. - 4:00p.m.

Mar. 1-4 Open 8:00a.m. - 4:00p.m.
Mar. 5-6 Closed

SPRING QUARTER:

Mar. 30-31 Open 8:00a.m. - 4:00p.m.
Apr. 1-3 Closed



1993-1994
SPECIAL LAB HOURS TOWER & SCIENCE COMPUTER LABS

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Mar. 5-6 Closed

SPRING QUARTER:

Mar. 30-31 Open 8:00a.m. - 4:00p.m.
Apr. 1-3 Closed

# College Of St. Scholastica Computer Lab Hours

## Tower Computer Lab

Tower 2110, 2411, 2415, 2420

**Regular Hours:**

| | |
|---|---|
| Mon. - Thurs. | 8:00a.m. - Midnight |
| Friday | 8:00a.m. - 5:00p.m. |
| Saturday | 9:00a.m. - 5:00p.m. |
| Sunday | 2:00p.m. - 10:00p.m. |

## Science Computer Lab

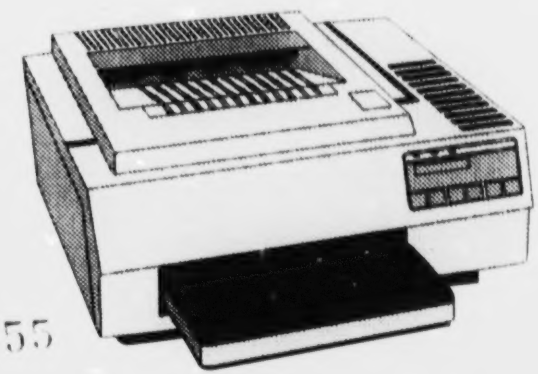
Science 175

**Regular Hours:**

Monday - Friday 8:00a.m. - 4:00p.m.

## Library Computer Lab

Open regular library hours.



College Of St. Scholastica Computer Lab Hours

Tower Computer Lab

Tower 2110, 2411, 2415, 2420

Regular Hours:

Mon. - Thurs. 8:00a.m. - Midnight
Friday 8:00a.m. - 5:00p.m.
Saturday 9:00a.m. - 5:00p.m.
Sunday 2:00p.m. - 10:00p.m.

Science Computer Lab

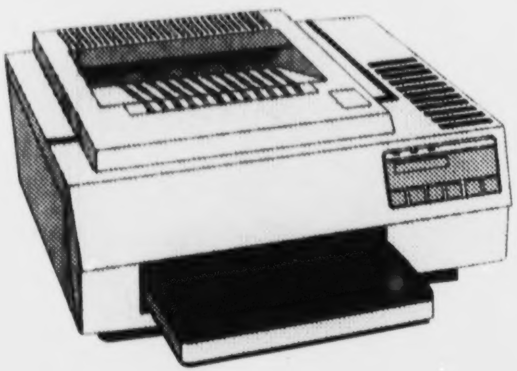
Science 175

Regular Hours:

Monday - Friday 8:00a.m. - 4:00p.m.

Library Computer Lab

Open regular library hours.



College Of St. Scholastica Computer Lab Hours

Tower Computer Lab

Tower 2110, 2411, 2415, 2420

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Mon. - Thurs. 8:00a.m. - Midnight
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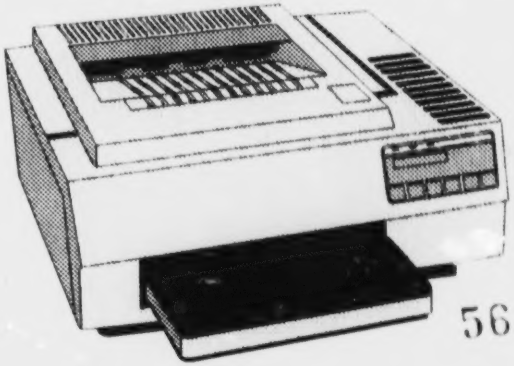
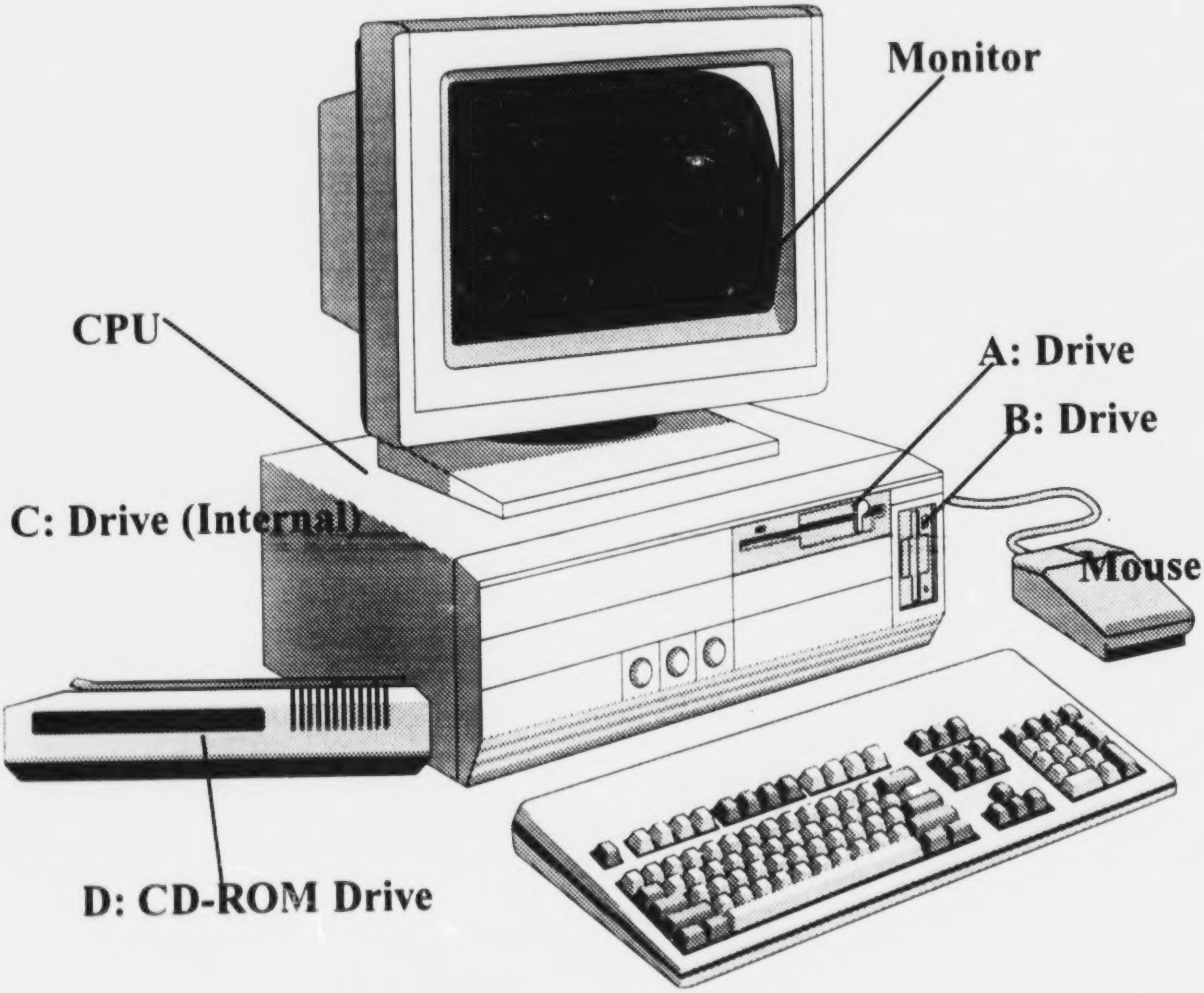


# COMPUTER PARTS


Monitor
CPU
A: Drive
B: Drive
C: Drive (Internal)
Mouse
D: CD-ROM Drive

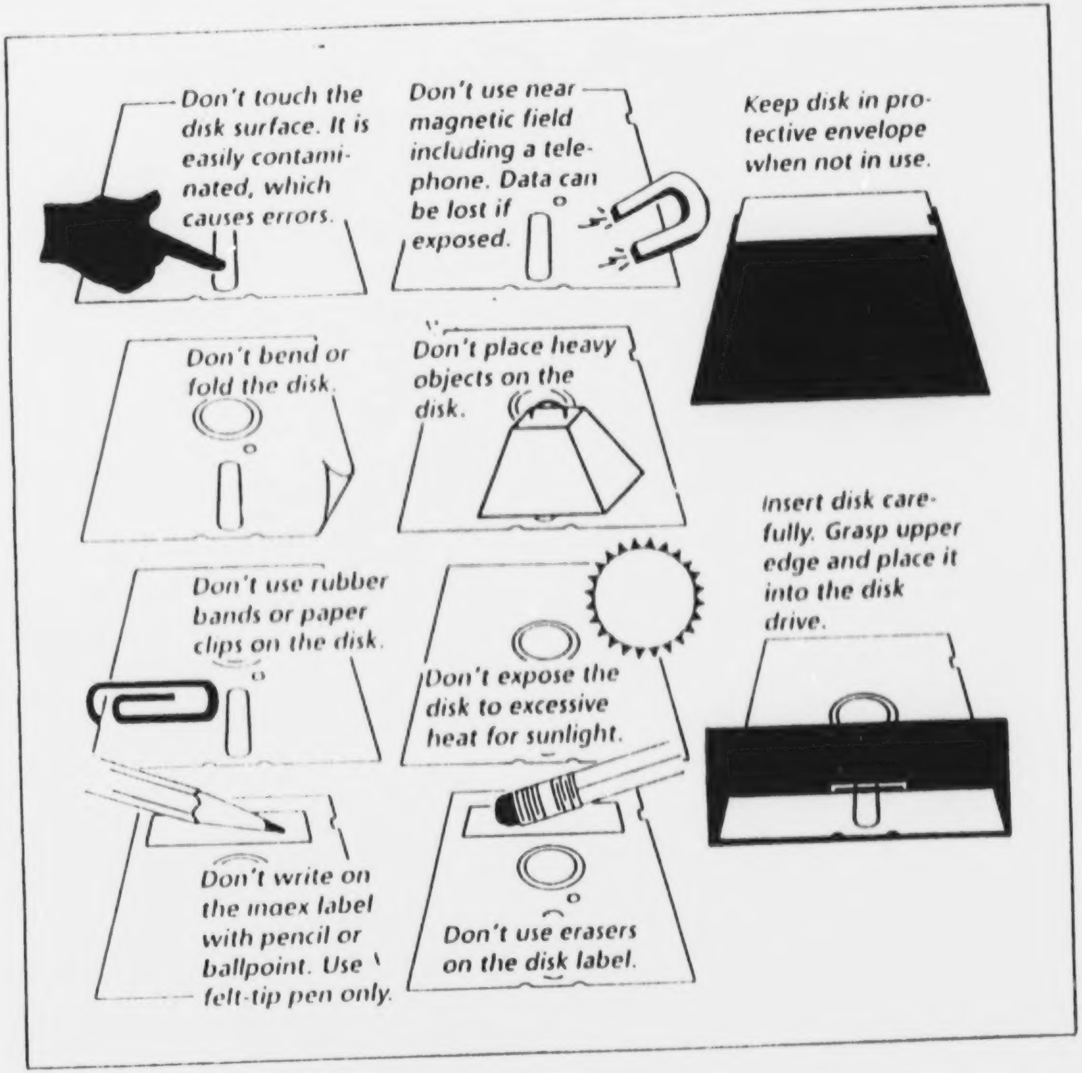
# EDM 437/537 Student Survey

Name:________________________________________

What is your major?

How much computer experience have you had?

What would you like to learn in this class?



Don't touch the disk surface. It is easily contaminated, which causes errors.

Don't bend or fold the disk.

Don't use rubber bands or paper clips on the disk.

Don't write on the index label with pencil or ballpoint. Use felt-tip pen only.

Don't use near magnetic field including a telephone. Data can be lost if exposed.

Don't place heavy objects on the disk.

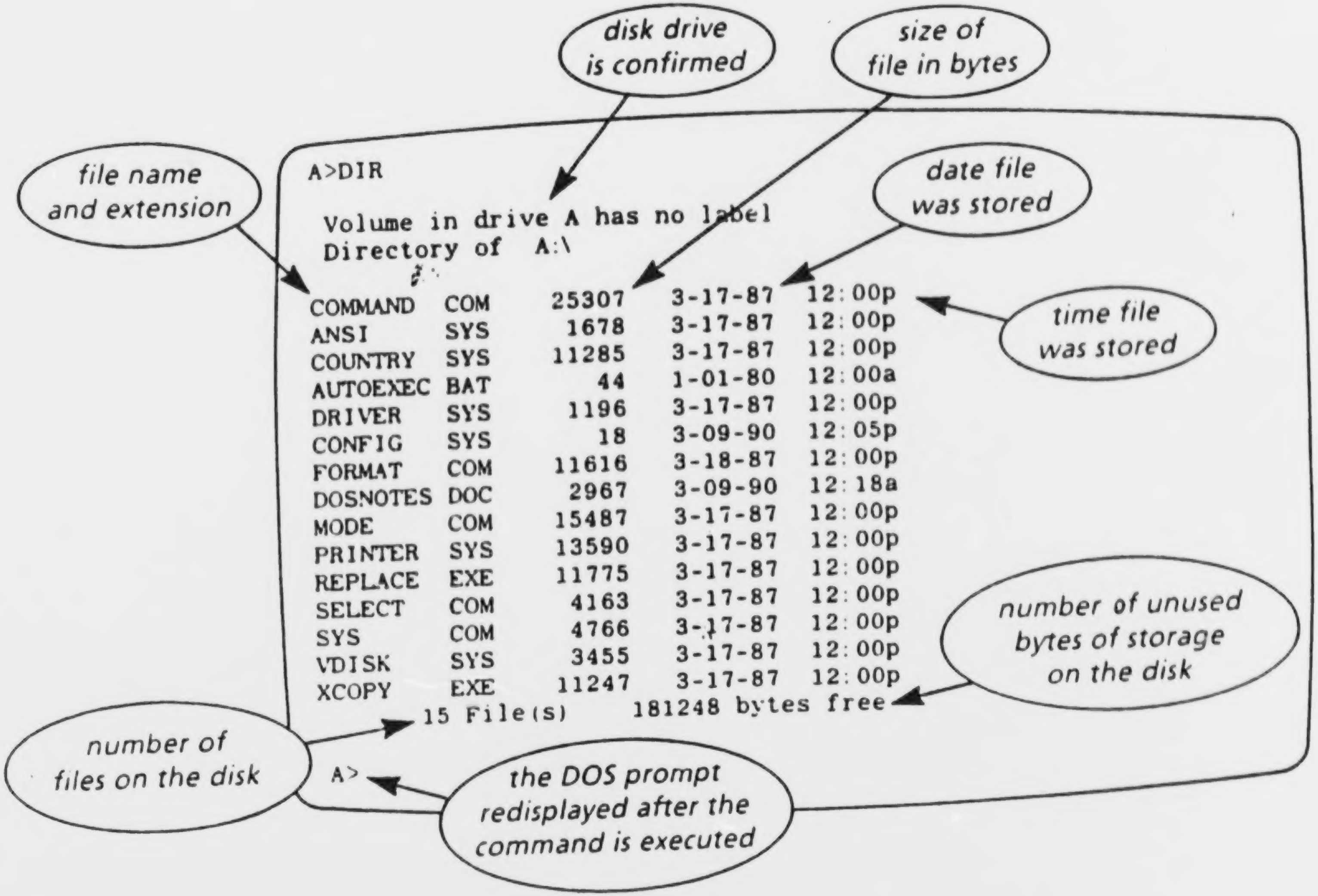
Don't expose the disk to excessive heat for sunlight.

Don't use erasers on the disk label.

Keep disk in protective envelope when not in use.

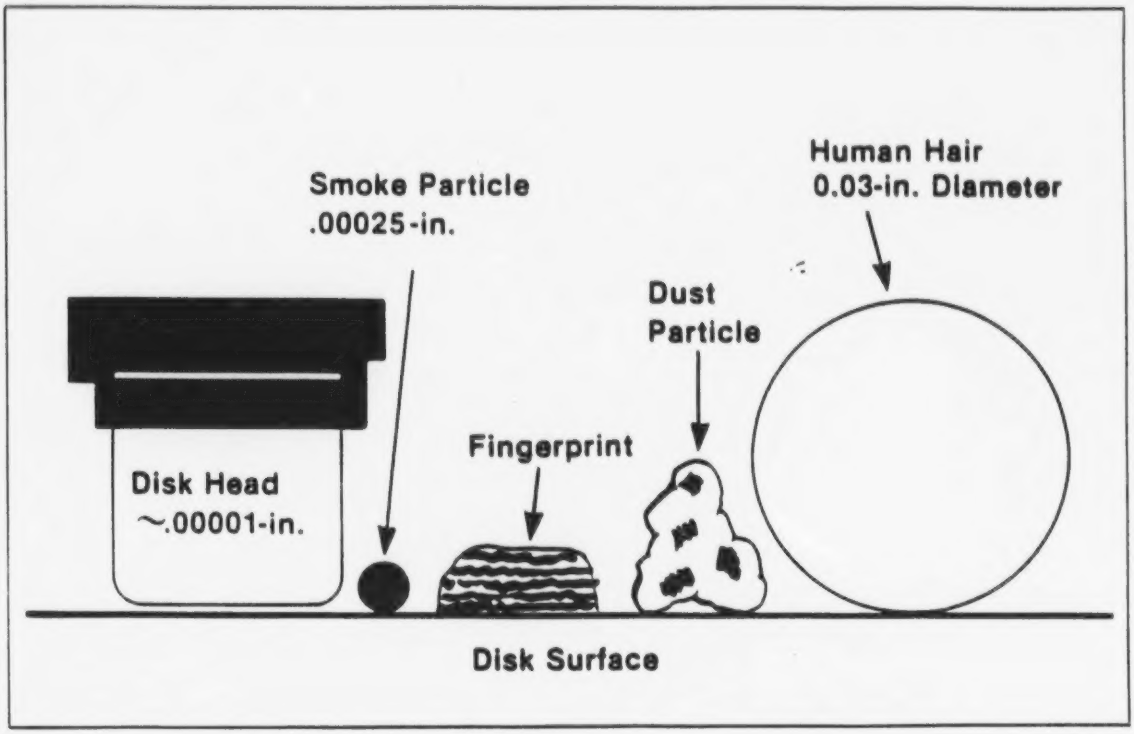
Insert disk carefully. Grasp upper edge and place it into the disk drive.

BEST COPY AVAILABLE

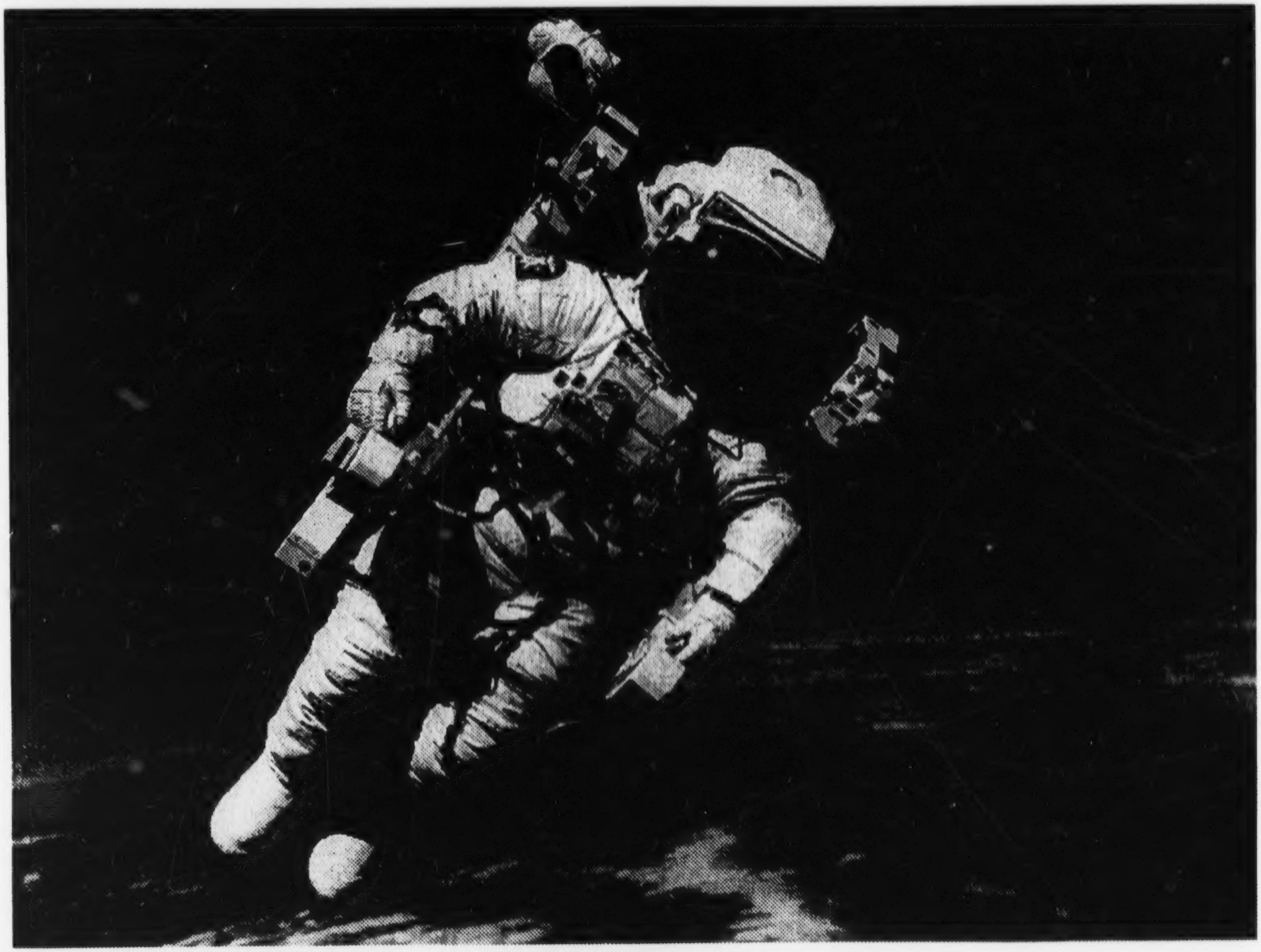


```
A>DIR

 Volume in drive A has no label
 Directory of  A:\

COMMAND  COM    25307   3-17-87  12:00p
ANSI     SYS     1678   3-17-87  12:00p
COUNTRY  SYS    11285   3-17-87  12:00p
AUTOEXEC BAT       44   1-01-80  12:00a
DRIVER   SYS     1196   3-17-87  12:00p
CONFIG   SYS       18   3-09-90  12:05p
FORMAT   COM    11616   3-18-87  12:00p
DOSNOTES DOC     2967   3-09-90  12:18a
MODE     COM    15487   3-17-87  12:00p
PRINTER  SYS    13590   3-17-87  12:00p
REPLACE  EXE    11775   3-17-87  12:00p
SELECT   COM     4163   3-17-87  12:00p
SYS      COM     4766   3-17-87  12:00p
VDISK    SYS     3455   3-17-87  12:00p
XCOPY    EXE    11247   3-17-87  12:00p
        15 File(s)    181248 bytes free

A>
```

disk drive is confirmed
size of file in bytes
file name and extension
date file was stored
time file was stored
number of unused bytes of storage on the disk
number of files on the disk
the DOS prompt redisplayed after the command is executed


Human Hair
0.03-in. Diameter
Smoke Particle
.00025-in.
Dust
Particle
Fingerprint
Disk Head
~.00001-in.
Disk Surface

# Dallas Museum of Art



NASA

# Smithsonian Art Gallery

Windows ColorLab™

From:
Computer Presentations, Inc.
1117 Cypress Street
Cincinnati, Ohio 45206
513/281 3222

**NASA**

# Appendix C

## Module of Instruction #2

# Module #2

Introduction to the internet

Topics: More on the PC, introduction to networking, what is the Internet?, what is available, how to find e-mail addresses, discussion groups, Telnet, talk, capture, levels of Internet access.

View in class: Video -US West - Accessing the Internet

Computer Tutorial: in class - Macintosh - Internet Cruise

Assignments:
- Reading and sending mail
- Telnet sessions
- Gibbs - Chapters 1-3, 5 and 13
- Lathrop - parts 4 & 5
- Read your Internet mail

# Housekeeping

**Materials**

Video - US West: Accessing the Internet

**View video**

Review
- **Hand in** survey sheets
- Turning on the computers
- Putting diskette in drive
- Two networks at CSS - local and Internet
- **Logging onto local network**
- Popmail - **readmail**
- Internet addresses - djohnson@css1.css.edu

What we will do today -
- Sign up for a discussion group
- Learn some Internet commands
- Concentrate on text retrieval today - next week do files and images
- Go to the Supreme Court, Library of Congress, University of Pennsylvania

# Discussion groups and Listservs

**Materials -**

Book on list of discussion groups
Textbook - discussion groups in back
Listserv commands transparancy

Allow people with common interests to have group discussions

A list for every interest - MEMO - Librarians, Media people, Billy Idol, Star Trek, Pets, Rolling Stones.

Allows you to send a message to the Listserv - that computer then sends the message to everyone in the group - they can then respond back to you personally or to the entire group.

Example - my question about printer in labs - got 30 responses - UK, Australia, all the US.

Subscribing - Always subscribe to the LISTSERV not to the group - whatever messages you send to the group will go to everyone.

The Listserv will notify you of your subscription

Just spend time reading the messages before you reply to get a feel for the group.

Be careful about the content of your reply - depends on the group - some are cruel

Moderated or Unmoderated -

Unmoderated - accepts and distributes all e-mail from anyone registered - you deal with a machine - no person

Moderated - human filters messages to make sure they are appropriate

EXAC - CTRL-ALT-M and CTRL - enter
K:\gifview\vpic
Mark slide #1-6

Listserv commands - **Slide #1**
- SUBSCRIBE
- SIGNOFF
- SET - alter your options
- MAIL - NOMAIL - can suspend mail like in summer
- DIGESTS / INDEX - all messages in one or just index

Can search a Listservs archived messages -

CTRL-ENTER to release EXAC
To subscribe to MEMO
go into popmail
compose
Send to LISTSERV@VAX1.MANKATO.MSUS.EDU
Leave subject blank
In body
SUBSCRIBE MEMO-net (your name)
press enter
Send

Those of you in different areas - please look through the book and find one that interests you

Fetch new mail - should have message welcoming you - print and keep
Remember this message is from a machine

Could set to digest - but memo-net will not let you
Now set Memo-net to digest so you get only one message a day
compose
Send to LISTSERV@VAX1.MANKATO.MSUS.EDU
Leave subject blank
In body
SET MEMO-NET DIGEST
press enter
Send

Managing your mail - some groups send 100 messages a day
Please read as often as possible

Exit Popmail

# Intro to the Internet

**Materials**

ERIC Review (copies)

Samples of what's available - Supreme Court, White House press releases, Gif files, weather maps, NASA,

Internet map transparency
NASA transparency
What resources transparency
Types of connections transparency
Internet Cruise - Mac program

EXAC - CTRL - ENTER
**Slide #2**
What is the Internet - Global network of networks -

**Slide #3, and Slide #4**
Network: A group of computers that communicate with each other - drawing
Show lines in lab

LAN - WAN

Modem

History - Started with the Department of Defense as a military project.

Today the Internet - millions of computers communicating - all kinds: Macs, IBMs, UNIX, others - funded by both commercial and governmental organizations

Terms used to describe - surfing, internaut, cruising, tunneling, mining, navigating

What's available -

**Slide #5**

Supreme Court
Libraries - including Library of Congress
NASA
Combat isolation
Smithsonian
Databases

files to download - text, graphics, software
Electronic mail - pen pals, interest groups, scientists, engineers, researchers, people meet other people - student is dating another from Case Western in Cleveland
Gutenburg - goal to give away one trillion electronic texts by 12-31-2001 - has given away 3.5 billion already, copyright free texts are scanned or typed into database
ERIC

Two things you will learn in this class - PATIENCE and TOLERANCE
    Computers fail - they are just machines - you are relying on thousands of computers when you use the Internet

**Types of connections to the Internet**

**Slide #6**

- Permanent direct -
  You must have your own network LAN - then connect that to a dedicated phone line directly to the Internet line.
  Not common except at universities or providers
  Best - Always available - on every computer on LAN - Most expensive
  Don't have to dial up

- On-Demand Direct
  This is what you want to ask TIES for - also available from commercial vendors
  PPP - Point-to-point
  SLIP - Serial Line IP
  Used with a modem and dial-up phone line and service provider
  Your computer has full Internet access

- Dial-Up Terminal
  What TIES is currently offering - $260 per year per connection
      Also available from commercial vendors
  Use dial up phone line to link with service provider
  You use the service providers computer
  When you transfer files they go to the provider's computer - then must get them down
  Takes a long time to transfer files to your computer

- Mail-Only Connections
  Usually cheapest
  Only send and receive mail

## Finger

Press C: and enter CD\MENU - MENU

Choose option #3 telnet on the menu - log in

Tells you who is logged into the system

Type Finger - tells you who is logged into CSS

Type Finger @gustavous - tells you who is logged into Gustavous

Can give you info on a particular person - person does not have to be logged on -

Type finger xxxxxx
        gives general information
    finger djohnson
        user can create a file to display
  finger Crow
        User can also put instructions in file to display
  finger yanoff@csd4.csd.uwm.edu

Does not work on all machines - some think it is an invasion of privacy

## Talk

Like a direct phone connection
Your screen splits in half - you see what the other person is typing

You can both type at the same time

The other person must be logged into their system
Example -
    Student fingered a machine in Mexico and randomly picked a person
        that was logged in
    He then requested a talk session and they chatted in Spanish - still are friends
    Last summer the students that work working for me would finger to see if I was logged on - if so they would request talk session and ask me questions

When you request a talk session with someone they get a message on their screen

Demonstrate with exac and Maggie

ALT - Y to end connection

Talk to your neighbor
ALT - Y to end connection

# Telnet

Materials

- Capture instruction sheet (copies)
- WP one page instruction sheet (copies)
- Telnet address and instruction sheet (copies)
- Netfind sheet (copies)
- Library of Congress
- PALS
- Cleveland teachers - Lesson plans
- University of Saskatchewan - ERIC

Telnet - software that allows you to run programs on another computer as if you where in front of it.

Disadvantages

Must know the address - next week we will use some searching software that allows you to search using menus

Screen may be slow - Patience

When you Telnet to a computer you are then using that computer and must know its commands

Go to the main menu - C: enter - cd\menu - menu - option #3 telnet

Using Telnet

Type TELNET and address you wish to go to

Can also use Gopher - menus instead of knowing the address

Logging in - some require passwords - some allow guest logins -

Remember - once you log onto another system you are now using their command keys - must follow online help very carefully.

Time limits - some remote machines have time limits and will give you the boot

Connection limits - some machines only allow a certain number of machines to connect at one time

Capturing screen - **handout**
Telnet addresses handout

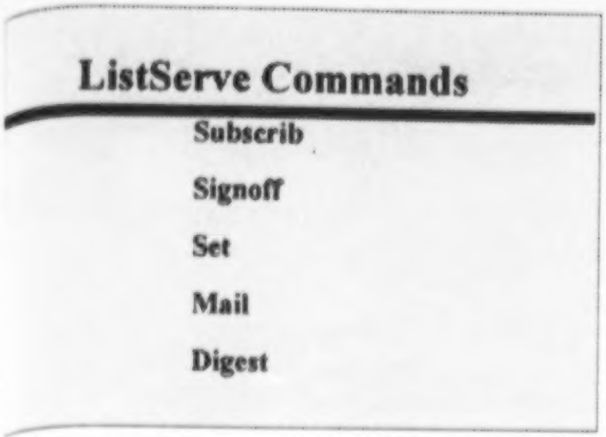
Using Telnet - show with EXAC first
    Connect to machine
    Capture
    exit
    print

May seem slow - think about what you are doing - communicating across the world

Telnet sessions - **handouts**
    Netfind - Whois - finding peoples Internet addresses
    Supreme court

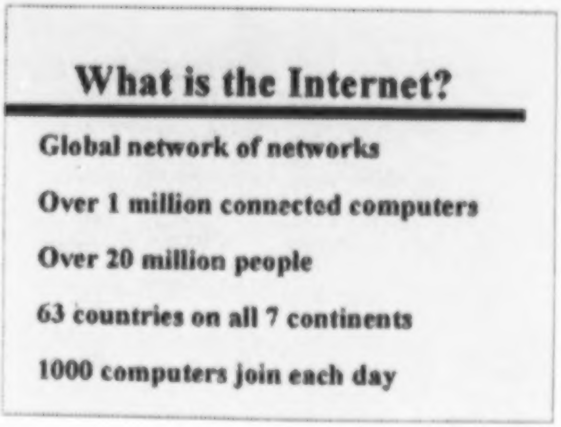
**End of class -**
    Look at mailing list book if you would like to choose another list
    Look in back of your Internet text - has lots of mailing lists (listservs)
    First research article due next week -
        Copy the article
        Attach a one page review and reactions
    Also will be a 10 pts team search next week

    Leave time for Internet Cruise on Mac
    Students practice telnetting to sites and capturing screen
        Use list of addresses and instructions



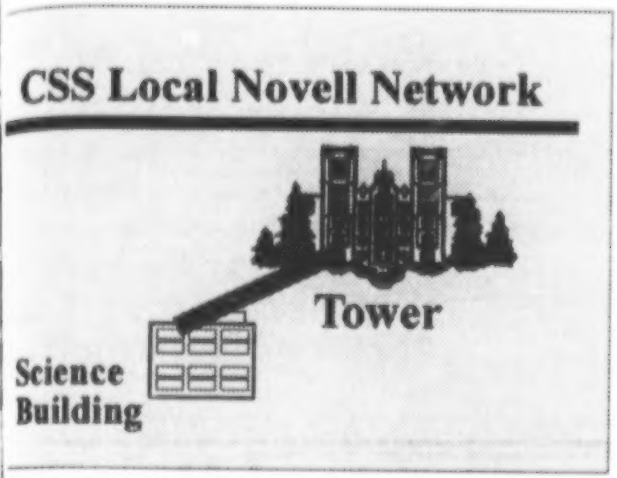
### ListServe Commands

- Subscrib
- Signoff
- Set
- Mail
- Digest



### What is the Internet?

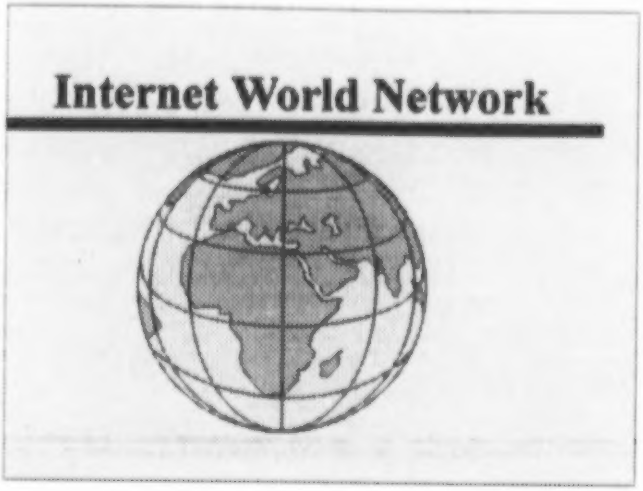
- Global network of networks
- Over 1 million connected computers
- Over 20 million people
- 63 countries on all 7 continents
- 1000 computers join each day



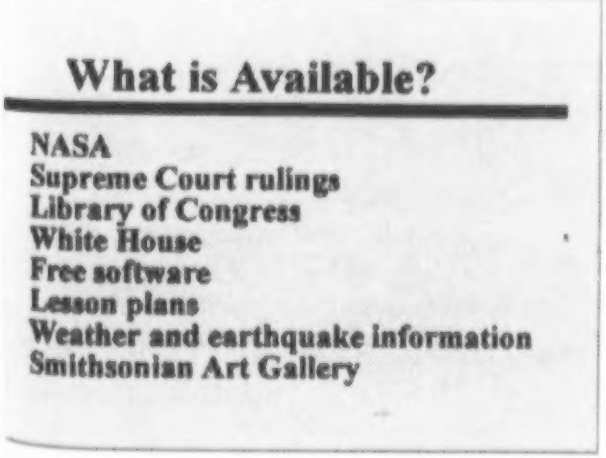
### CSS Local Novell Network

Tower

Science Building

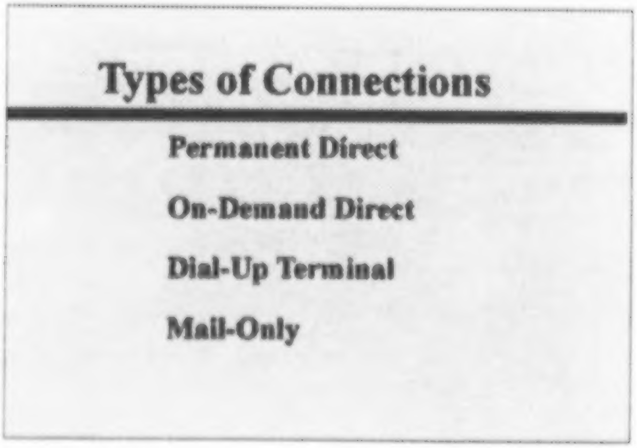


### Internet World Network



### What is Available?

- NASA
- Supreme Court rulings
- Library of Congress
- White House
- Free software
- Lesson plans
- Weather and earthquake information
- Smithsonian Art Gallery



### Types of Connections

- Permanent Direct
- On-Demand Direct
- Dial-Up Terminal
- Mail-Only

# Telnet Sessions

**PALS**

The library card catalog system for CSS and other colleges
telnet x29gw.msus.edu and enter
Takes you into the regular PALS system
To log out type end and enter
type $$SOFF and enter

**UNIVERSITY OF SASKATCHEWAN** - ERIC education database

Contains education, health, humanities/social sciences, legal, science, and newspaper databases.
telnet sklib.usask.ca
Username: type SONIA and enter
Type quite to exit

**LIBRARY OF CONGRESS**

Research library serving Congress, the federal government, and the world-wide library community.
telnet locis.loc.gov
Menu tells you how to logoff

**PENNSYLVANIA STATE UNIVERSITY** - Teacher Pages

Useful information for teachers.
telnet psupen.psu.edu
Username: type TX and enter
Menu tells you how to logoff

**CLEVELAND LEARNING VILLAGE** - Teaching Resources

Contains a teaching newsletter, curricular database, new project announcements, special program information, and a teacher education center.
telnet nptn.org
Login: type visitor and enter
Follow screen directions
Menu tells you how to logoff

**UNIVERSITY OF MARYLAND** - lots of neat stuff
telnet info.umd.edu
press enter for VT100 type terminal
When prompted type Q to quit

**UNIVERSITY OF MAINE** - National Art Gallery and serial information
telnet ursus.maine.edu
Do not press enter!
At the Main Menu - press B to connect to another database
press 2 for the National Gallery of Art

**UNIVERSITY OF MICHIGAN** - Weather and earthquake information
telnet downwind.sprl.umich.edu 3000

**CLEVELAND FREENET** - Historical documents, USA Today, and other neat stuff
telnet freenet-in-c.cwru.edu
or telnet freenet-in-b.cwru.edu
or telnet freenett-in-a.cwru.edu
login as a visitor and explore the system

**TALLAHASSEE FREENET** - Educational materials and other misc.
telnet freenet.scri.fsu.edu
login as visitor

**YOUNGSTOWN FREENET** - Supreme Court decisions and other governmental documents
telnet yfn2.ysu.edu
login as a visitor

**STOCK MARKET REPORT**
telnet a2i.rahul.net
login as guest
select n for guest menu
press enter when asked for terminal type
press enter for rows and columns
select MENU: Current System info
select Market Report

**NASA HEADLINE NEWS**
This is a long file so make sure and start your capture before you finger
finger nasanews@space.mit.edu

## Capturing an Internet screen session and printing

When you are on the Internet the screen sometimes scrolls past very quickly not giving you a chance to read what it says. There are also occasions in which you would like to save what you see on the screen and print it on a printer.

On all the computers in the computer labs you have the ability to capture everything that displays on the screen to a file. This file is stored on the hard drive (C:) of the computer. You can then save that file and print it.

Deleting the old capture file
You must delete the old capture file otherwise your new screens will just be added to old material

type **del c:\telnet23\capfile** and **enter**

**Log onto the Internet**
Get to the point in which you wish to start capturing

Press **ALT-C**
In the lower right corner of your screen you should see Capt highlighted
Everything that is sent to your screen is now also being sent to the file c:\telnet23\capfile

Turn capture off
press **ALT-C**

**exit Internet**

**Printing**
To print on the network laser printers you must be logged into the local Novell network with the capture command. CAPTURE L=1 Q=PRINTQ_2 TI=10

> This capture statement will route the printing to the printer in the Teagle computer lab

Type **PRINT C:\TELNET23|CAPFILE** and **enter** he MEMO-net LISTSERV subscription information.

he Minnesota Educational Media Organization (MEMO) administers a STSERV discussion group for library/media and technology ofessionals, and interested parties. It is an unmoderated ncensored) LIST. All e-mail sent to the LIST will be posted on he list.
he LISTSERV administrator is Don E. Descy, Ph.D., Associate ofessor, Library Media Education, Mankato State University, nkato, MN 56002-8400. e-mail: descy@vax1.mankato.msus.edu
he list was started on January 1, 1994.

bscription Information:

To subscribe to the MEMO-net LISTSERV, send an e-mail message o:

LISTSERV@VAX1.MANKATO.MSUS.EDU

eave the subject line blank and use the following message:

SUBSCRIBE MEMO-net (Your Name)

Example:

SUBSCRIBE MEMO-net Don E. Descy

To unsubscribe, send an e-mail message to:

LISTSERV@VAX1.MANKATO.MSUS.EDU

eave the subject line blank and use the following message:

UNSUBSCRIBE MEMO-net

OTE: MEMO-net LISTSERV is presently using PMDF MAILSERV software.

he peculiarity with this is that the 'From' address in your mail rectory will not list MEMO-net. It will list the sender. To aid n differentiation, please write MEMO-net as the first part of our subject.

second peculiarity is that you will probably not be able to use he reply command. You will have to resend to:
emo-net@vax1.Mankato.msus.edu

'help' file is also available. To receive it please send an e-ail message to:

LISTSERV@VAX1.MANKATO.MSUS.EDU

eave the subject line blank and send the following message:

HELP

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# Appendix D

## Module of Instruction #3

# Module #3

Searching software on the Internet

Topics: WAIS, WWW, Gopher, Veronica, Archie, file types, software types.

View in class: Video - NASA - Global Quest: The Internet in the Classroom

Assignment:
- Class activities
- Internet searching for treasures
- Gibbs - Chapters 7 - 9
- Lathrop - part 6
- First research article due - 10 pts
- Team search - 10 pts.
- Read your Internet mail
- Gopher handout

# Housekeeping

**Materials**
- Gopher handout
- learning experience outlines and examples
- Video - NASA

**Review from last week -**
- two networks - log onto local first - #1 on menu - what are they used for?
- A: B: C: drives
- popmail - read mail
  - NOTE: - job from memo-net
- discussion groups - what are they? - listservs
- What is Telnet? - advantages - disadvantages - need to know address and password
- screen capture - save to a file to print later
- finger
- talk

ARE YOU READY TO GO SURFING!!!!!!!

# WAIS

**Materials**

Slides

k:\gifview
vpic - choose mod2-1 and mod2-2

EXAC - CTRL-ALT-M
CTRL - ENTER

**Slide one** - disadvantage of using telnet to a specific address
Main disadvantage of telnet - need to know address
There are searching tools we can use to surf the Internet

**Slide two** - WAIS

WAIS = Wide Area Information Server -
Allows you to search for and retrieve information from remote databases

WAIS indexes the full text of sources. Most sources are text

Most Wais servers are free - data may be eccentric and erratic

After you run a search - WAIS gives you your "hits" in order of relevance. Ranks by the number of search words that occur and number of times they appear.

STOP WORDS - words that WAIS ignores - depend on the system but usually: a the about above across after

Primitive searching - can't use "or" or "and"

Cow and farm will search documents that contain "cow" , and/or "and", and/or "farm".

use COW FARM will search for cow and/or farm

Over 400 libraries available on WAIS including listservs

Sources: beer brewing, recipes, thesaurus, music, poetry, biology abstracts, weather forecasts

Access WAIS three ways

Telnet quake.think.com - login as WAIS
Run a local WAIS client
Get WAIS through Gopher

**EXAC - Demonstration**

Telnet quake.think.com - login as WAIS
Space to select directory of sources
w to enter keyword search
MULTIMEDIA and enter
highlight source and hit u to add to the source list
s to go back to sources
highlight source and press space to select or deselect it
w to search
MULTIMEDIA and enter
highlight source and enter to view
highlight source and m to mail
enter your address

results ranked according to relevance

# WWW

**Slide 3** - WWW

World Wide Web

Invented in Switzerland

All Internet data is hypertext - keywords have links to other text

Hypermedia - like hypertext but the links are just to other text - can be to audio, video, graphics

**EXAC - Demonstrate**

**telnet gopher.msu.edu - login as web**

# Gopher

**Materials**

Gopher handout (copies)
Smithsonian (copies)
Dallas Museum of Art (copies)
File compression sheets (copies)

**Slide 4 - Gopher**

Main disadvantage of telnet - need to know address
    Gopher knows the address of hundreds of useful resources

Gopher - allows you to search for things on the Internet using menus

Can telnet to a gopher or use client server software

Client - server software - FREE
    Client software runs on your machine
    Server is another machine you attach to
    Each Gopher server is linked to other servers
    Easier to use than telnet

Like octopus tenticles

Gopher retrieves files and data for you

Over 1300 servers and thousands of clients - you won't know which one to use

Veronica
Veronica - Very Easy Rodent-Oriented Net-wide Index to Computerized Archives
    Allows you to search the menus of all the registered Gophers

**Slide 5** - Veronica

PAITIENCE AND TOLERANCE - people that program these menus are not librarians. Don't expect it to be like a card catalog

**Show - Bart.gif**

Think - Gopher is like having a huge worldwide card catalog that is maintained and taken care of by millions of different people of different professions

Also - machines may be down, full, or forbidden

Searching directories or Gopherspace

EXAC DEMONSTRATION -
Veronica Keyword search - may use boolean (and or ) will go over next week
Search for SMITHSONIAN
Results can be menu items from around the world

EXAC DEMONSTRATION - set a bookmark for the SMITHSONIAN
Bookmarks - sit at same computer next week to save your bookmark

**Slide 6** - filetypes
file types

Compression

.tif .pcx .wmf .gif .bmp
.tst .doc
.exe .com
.zip

**Show - Gopher.gif**

EXAC DEMONSTRATION IF TELNET GOPHER
telnet enews.com login as gopher

EXAC DEMONSTRATION of client - server gopher
point gopher to smithsonian or dallas
gopher.unt.edu
Step through Dallas handout

# Interesting Gophers

Client - server verses telnetting

"Pointing your gopher"

Can point to or directly telnet to a particular gopher or - search for it using Veronica

# End of Class

Search - 10 pts - Dallas Museum of Art

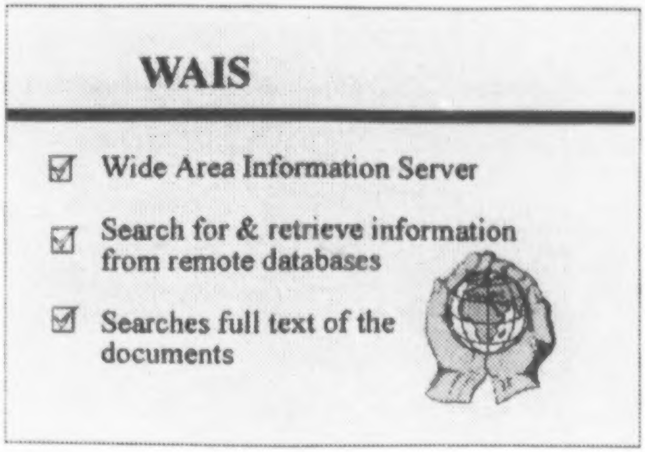
Internet Cruise on the Mac

Experiment with telnet gophers, WWW, and WAIS if you wish

Reset gopher to ua.d.umn.edu

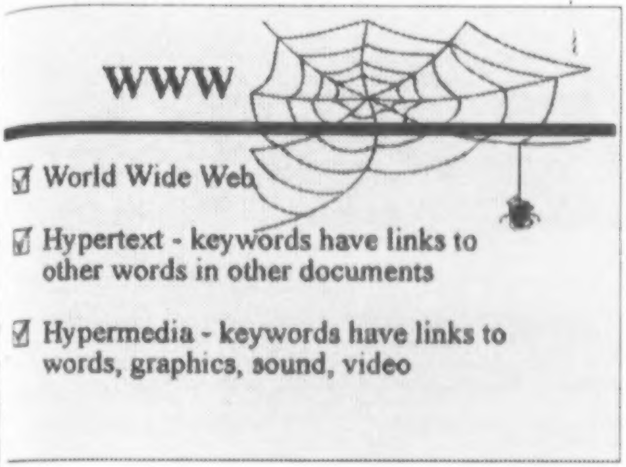
## Disadvantage of Telnet

- ☑ Must know the address of the sources you wish to retreive
- ☑ Solution: Search tools like WAIS, WWW, Gopher, and Veronica



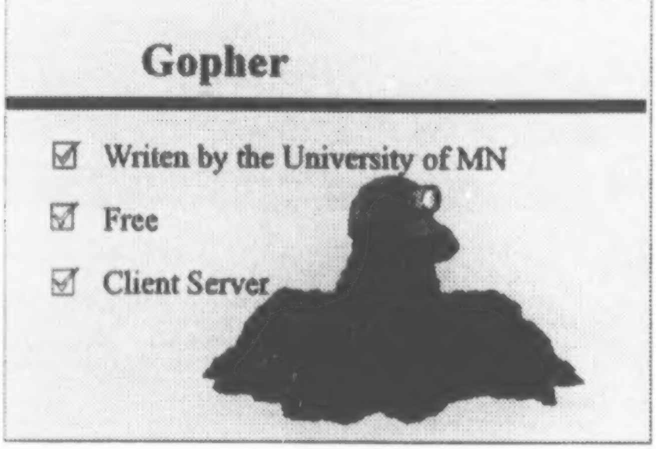
## WAIS

- ☑ Wide Area Information Server
- ☑ Search for & retrieve information from remote databases
- ☑ Searches full text of the documents



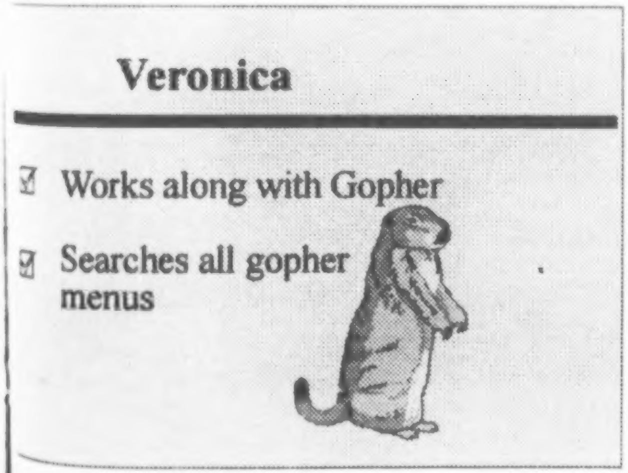
## WWW

- ☑ World Wide Web
- ☑ Hypertext - keywords have links to other words in other documents
- ☑ Hypermedia - keywords have links to words, graphics, sound, video



## Gopher

- ☑ Writen by the University of MN
- ☑ Free
- ☑ Client Server



## Veronica

- ☑ Works along with Gopher
- ☑ Searches all gopher menus

## File Types

- ☑ Text Files: .TXT .DOC
- ☑ Graphic Files: .PCX .GIF .WMF .BMP .WPG .TIF
- ☑ Program Files: .EXE .COM
- ☑ Compressed Files: .ZIP .ARC

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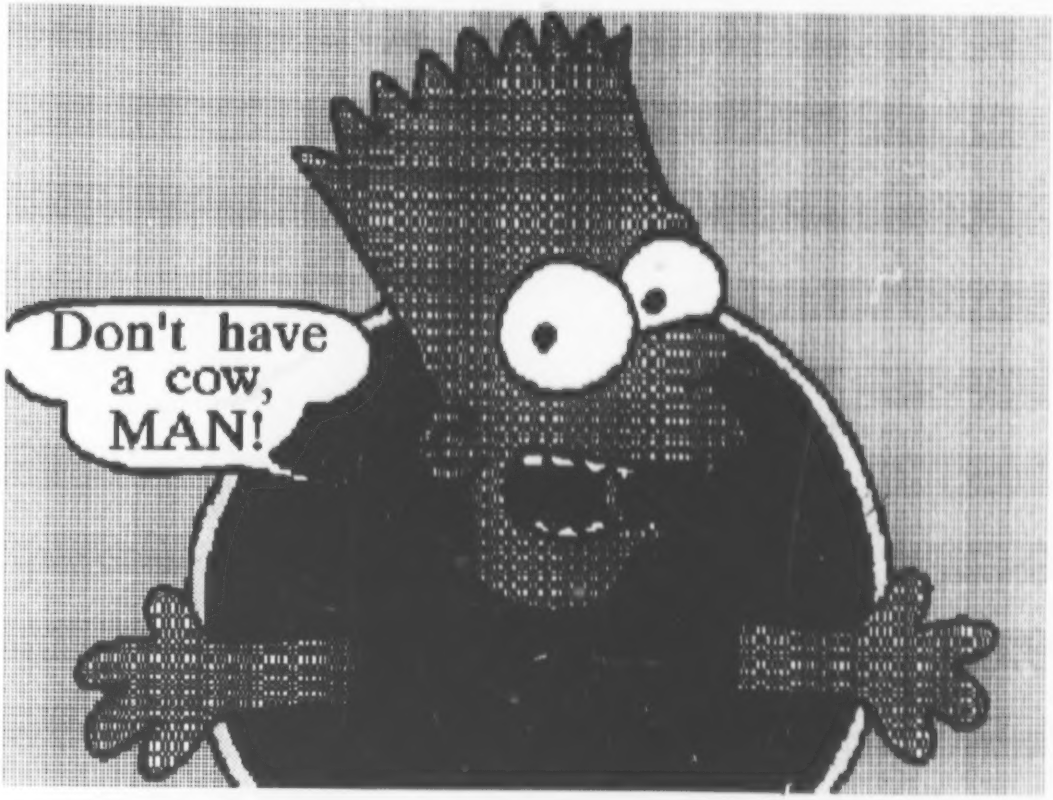
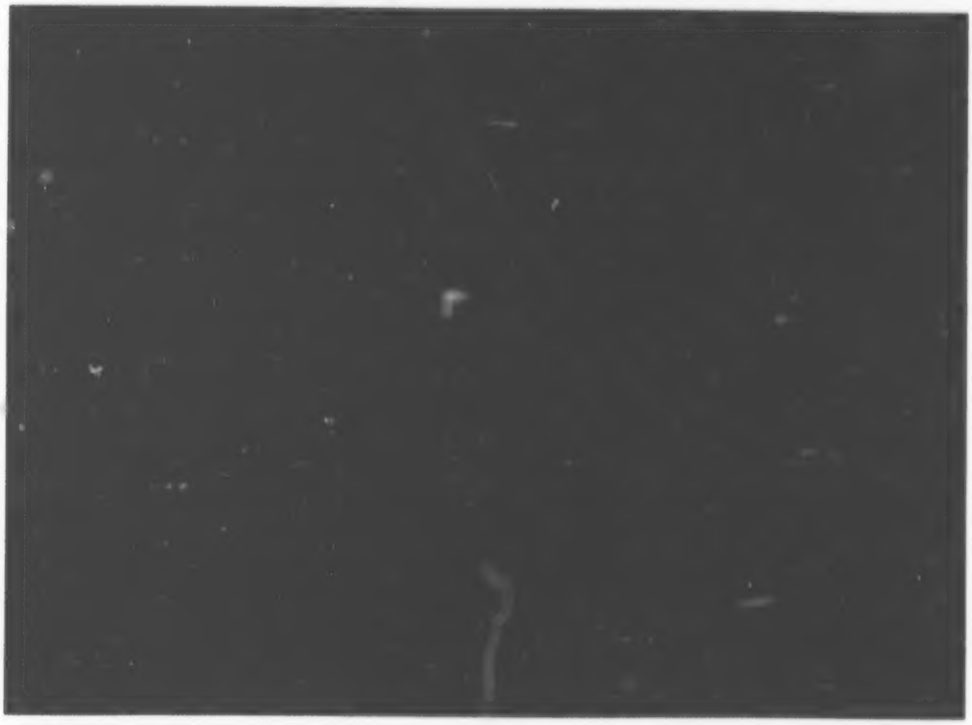

Don't have
a cow,
MAN!



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# Client - Server Gophers

Need gopher software on your machine to work these gophers.
Need to "point" your client gopher to the address of your choice.
On the CSS lab computers it is done by doing the following:
Configure - Application - Home Gopher Server: enter address you wish
click on ok, press ALT-G to attach to your new gopher

| | |
|---|---|
| Electronic Newsstand | enews.com |
| ERIC gopher | ericir.syr.edu |
| K-12 resources | gopher.dana.edu |
| K-12 resources | gopher.cic.net<br>Other CICNet Projects and Gopher Servers<br>K-12 on the Internet |
| Keypals | wealaka.okgeosurvey1.gov<br>K12 section |
| Gopher for k-12 students - no inappropriate links | nwoca7.nwoca.ohio.gov |
| Texas K-12 | gopher.tenet.edu |
| Ralph Bunche School Gopher - set up by 3-6 graders | ralphbunche.rbs.edu |
| United States Bureau of the Census | gopher.census.gov |
| U.S Department of Ed and Office of Educational Research and Improvement | gopher.ed.gov |
| University of Michigan - subject oriented | gopher.lib.umich.edu<br>What's New and Featured Resources<br>Clearinghouse |

| | |
|---|---|
| Michigan Department of Ed | gopher.mde.state.mi.us |
| Full text Supreme Court decisions | info.umd.edu<br>/educational resources/United States/Supreme Court |
| Gopher Jewels | cwis.usc.edu<br>Other gopher and info resources |
| University of Saskatchewan Humor gopher - Kevin's Prarie Dog Town | skynet.usask.ca |
| MEMO Gopher | gopher.mankato.msus.edu<br>other information servers<br>MEMO |
| Berkeley Museum of Paleontology | ucmp1.berkeley.edu |
| General Gopher - UMD | ua.d.umn.edu |

**Images**

| | |
|---|---|
| Lots of images | miles.library.arizona.edu |
| Smithsonian | photo1.si.edu<br>also available through miles.library.arizona.edu<br>under Images |
| Dallas Museum of Art | gopher.unt.edu<br>Denton, Dallas & Ft. Worth Information/Dallas Museum |

**RESET your Gopher Client** to ua.d.umn.edu when finished surfing

# Telnet Gophers

You can telnet to these gophers from your school

Public Gopher Telnet sites

| | | |
|---|---|---|
| telnet gopher.unt.edu | login as gopher | Texas |
| telnet gopher.msu.edu | login as gopher | Michigan |
| telnet gopher.virginia.edu | login as gwis | Virginia |
| telnet consultant.micro.umn.edu | login as gopher | Un. of MN |
| telnet ux1.cso.uiuc.edu | login as gopher | Illinois |
| telnet info.umd.edu | no login needed | Maryland |

Electronic Newsstand

telnet enews.com login as gopher

ERIC gopher

telnet ericir.syr.edu login as gopher  
press enter for VT100  
enter name or just press enter

Full text Supreme Court decisions and other neat stuff

telnet info.umd.edu no login needed Maryland

# Telnet WAIS and WWW

## WAIS Telnet location

telnet quake.think.com - login as WAIS

Instructions:
press space bar to select directory of sources
press w for keyword search
type in your keyword you wish to search on and press enter
highlight source you wish and press u to add it to the source list
press s to return to your source list
use your space bar to select and deselect sources
press w for keyword search
type in your keyword you wish to search
highlight source and press m to mail it to you
enter your e-mail address

## WWW telnet locations

New Jersey - telnet www.njit.edu
login as WWW

ERIC WWW - telnet gopher.msu.edu
login as web

# GOPHER

AUSTRALIA
SWEDEN
CANADA
UNITED STATES OF AMERICA

*Diana Johnson*
*Computer Lab Manager*

# Introduction

**What is Internet?**

The Internet is a connection of thousands of computer networks. Thousands of computers are connected and millions of people have access to them. You have access to the information on computers throughout the world using Gopher.

**What is Gopher?**

A gopher is an animal that tunnels its way throughout the earth. The Internet Gopher allows you to tunnel your way through the Internet. When the Internet Gopher finds a good resource we computer people say you have found a good "Gopher hole"!
The Internet is a HUGE pool of information. It works wonderfully as long as you know the address of the computer that has the information that you need. Gopher is a tool that makes it easy to find information even when you don't know the address of the computer. It allows you to find information on thousand of computers throughout the world by simply choosing options from a menu.

**Experimental Note:**

Gopher is very new and experimental. Although it is a wonderful tool, you may run into minor glitches occasionally. Please be patient and try another "gopher hole". Also remember that things are always changing in "Gopherspace". A resource that you find one day may be moved to another location the next day.

**Mouse**

Gopher works with or without a mouse. If you use a mouse there are a couple techniques you need to know.

**Clicking** - click once with your left mouse button
**Double clicking** - two quick clicks with your left mouse button
**Dragging** - hold down your left mouse button while you move your mouse

If you do not have a mouse you will have to use the keyboard instructions.

**Starting Gopher**

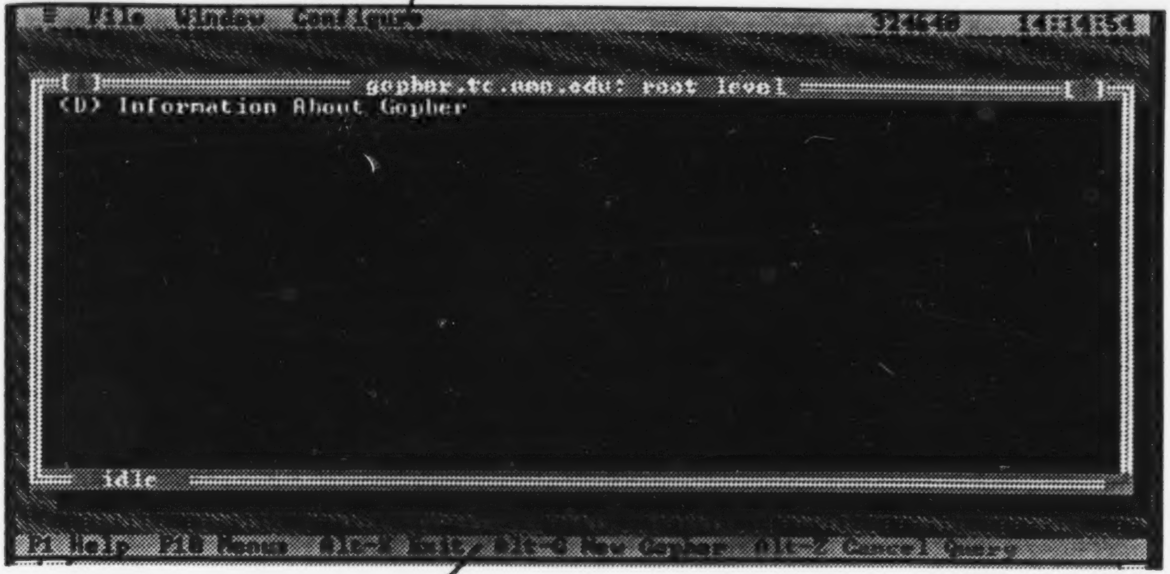
Most of the computers in the labs have Gopher. Choose the option from the menu for Gopher. Your Gopher program will automatically connect to the "mother" Gopher at the University of Minnesota in the Cities.

# Menu and Status Bars

Consists of 4 pull down menus

Click on your choice

**F10** to make menu bar active - arrow keys to select menu - enter to pull down menu


Menu Bar
File
Window
Configure
F1 Help
F10 Menus
Alt-X Exit
Alt-G New Gopher
Alt-Z Cancel Query
Status Bar

```
gopher.tc.umn.edu: root level
<D> Information About Gopher

idle
```

**Status Bar**
**F1** - Help
**F10** - Menus
**Alt-X** - Exit
**Alt-G** - New Gopher (starts a new Gopher session)
**Alt-Z** - Cancel Query (cancels a search)

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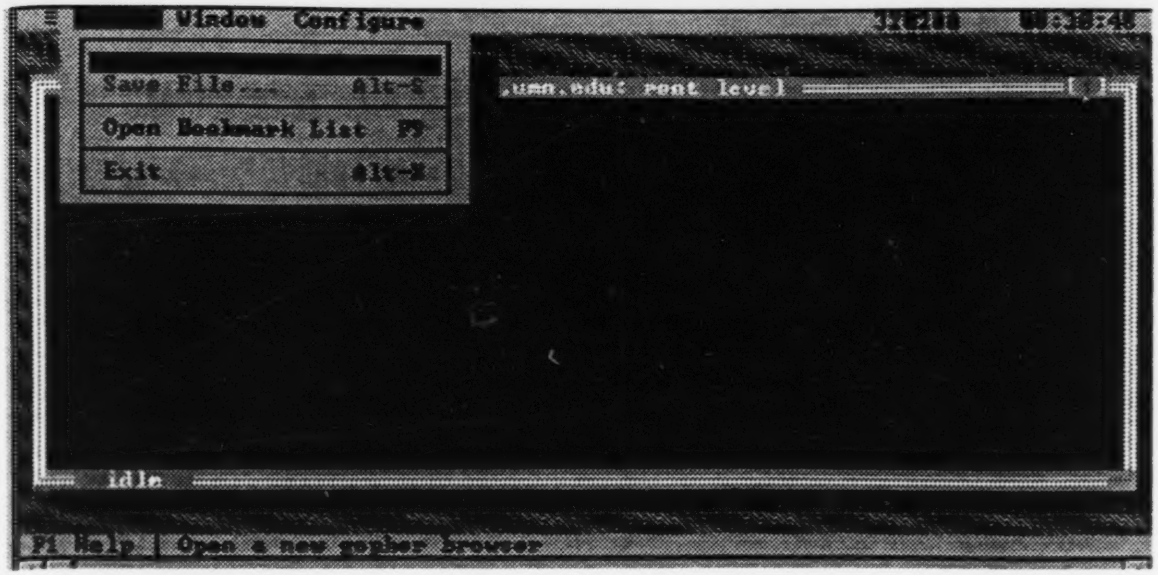
# Pull Down Menus


Window
Configure
Save File... Alt-S
Open Bookmark List F9
Exit Alt-X
.umn.edu: root level]
idle
F1 Help
Open a new gopher browser

**To Activate the menus**

Click on your menu choice

To make the menu bar active: **F10**

| | | |
|---|---|---|
| **#** | About PC Gopher III | copyright information |
| | Calculator | pop-up calculator |
| | Calendar | monthly calendar |
| | Puzzle | mind teaser game |
| | Dos shell | temporarily leave Gopher and use dos |
| **File** | New Gopher | opens new connection to gopher |
| | Save file... | Save the active file |
| | Open bookmark list | opens your bookmark list |
| | Exit | quits Gopher |
| **Window** | Next | brings back window to the front |
| | Size/move | allows you to move the window with arrow keys |
| | Zoom | makes the current windows full screen size |
| | Close | closes the current window |
| **Configure** | Network settings | You should never have to worry about this menu<br>Everything has been preset for you |

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# Sizing and Moving Windows

Gopher works on a "windows" based concept. You can move and size these windows.

## Sizing windows -

drag the lower right hand corner

CTRL-F5 , hold down the shift key while you press an arrow key, press enter when the window is the size you want

## Moving a window -

drag the top

CTRL-F5, use your arrow keys to move the windows, press enter when done

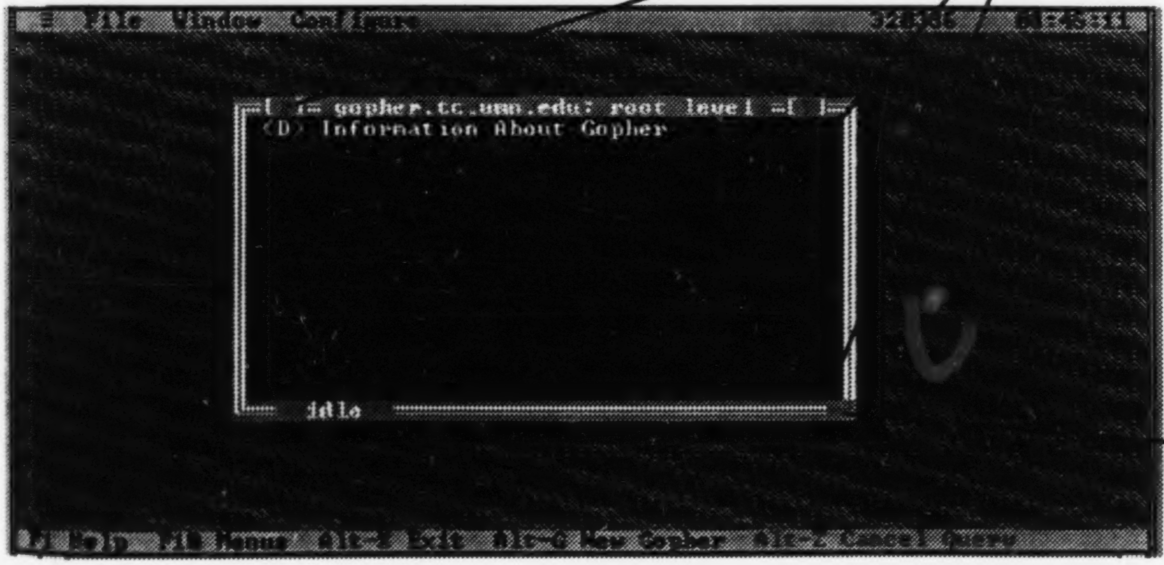
## Closing a window

Click on the upper left hand corner square

ALT-F3

## Scroll Bars

Allows you to see what is scrolled off the window


Close
Scroll Bars
Window Sizing
File
Window
Configure
gopher.tc.umn.edu: root level
<D> Information About Gopher
idle

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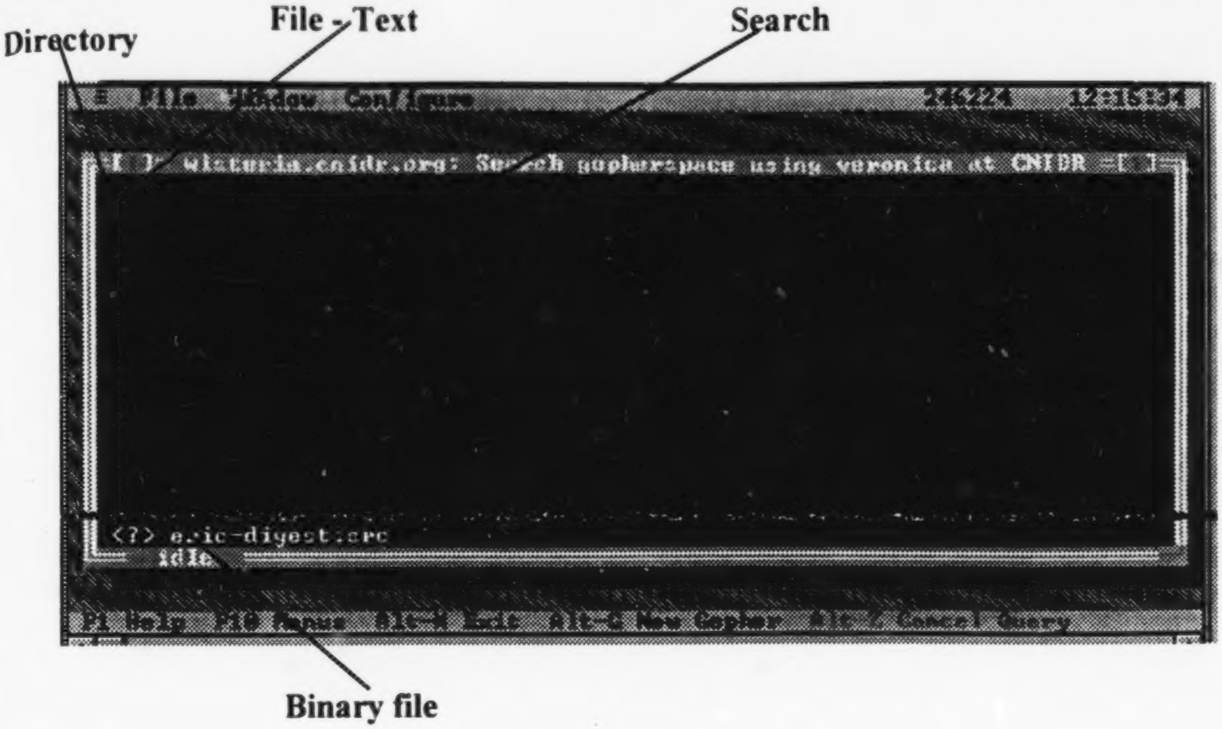
# Gopher Item Types


Directory
File - Text
Search
File Window Configure
246224 12:15:34
wisteria.cnidr.org: Search gopherspace using veronica at CNIDR
<?> eric-digest:src
idle
F1 Help F10 Menus Alt-X Exit Alt-G New Gopher Alt-Z Cancel Query
Binary file

<F> - Text file - Gopher will retrieve it for you

<D> - Directory - will give you another Gopher list

<B> - Binary file - usually a program - Gopher will retrieve it for you

<T> - Telnet session - you will temporarily leave Gopher and telnet to another computer. When you are finished you will then return to Gopher. Remember: when you leave Gopher the Gopher commands no longer work. You must use your telnet session commands.

<P> - Phone book - will ask you for a person to look up

<?> - Search item - you will be prompted for a word or phrase to search for

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# Other Gopher and Information Servers

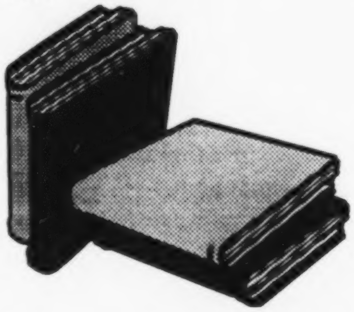
All the Gopher Servers in the World

Following are a few examples of Gophers that may be of interest to you:

ACADEME This Week (Chronicle of Higher Education)
Academic Position Network
American Mathematical Society
American Physiological Society
European Gophers
Apple Computer Higher Education
Hospitals
DNA data bank of Japan
National Genetic Resources
NASA
National Science Foundation
National Institute of Health

## Bookmarks

You can save your place if you find a good "Gopher hole". File - Open Bookmark. To add a bookmark simply find the spot you want to save, open the bookmark, and click on add.



## Libraries using Gopher

You have access to libraries across the world including PALS using Gopher. So you can access PALS on any system that has Gopher. A bookmark has been set up for you to use PALS. You choose PALS from the bookmark and then choose the Minnesota State University System.

**Library possibilities** -Libraries throughout the world, Library of Congress, electronic books, journals, newspapers, magazines, newsletters, Information from the U.S. Government, world fact book, Eric digests, dictionary, thesaurus, telephone area codes, and the Periodic Table of Elements.

# Searching with Gopher

## Searching Gopherspace with Veronica

Veronica = Very Easy Rodent-Oriented Net-wide Index to Computerized Archives. Veronica allows you to search through all the Gopher servers in the world for a particular topic. One thing to remember is that you are searching Gopher menus and not the actual data that they contain. Your results are displayed in a Gopher menu format. You can have line items from computers throughout the entire world on your particular subject. Each line item points to a Gopher data source. You can search one word or use the simple boolean search. The boolean search allows you to use "and" and "or".
**Search considerations:** Veronica indexes the TITLES on all levels of the menus for Gophers on the Internet. It does not search the full text of the file.

**Double click** on Other Gophers and Information Servers
**Double click** on Search titles in Gopherspace using Veronica

**Use your arrow keys** to highlight Other Gophers and Information Servers - press **Enter**
**Use your arrow keys** to highlight Search titles in Gopherspace using Veronica - press **Enter**
**Search possibilities** - Readers Guide, Eric, your favorite newsletter (it may be online), your favorite organization

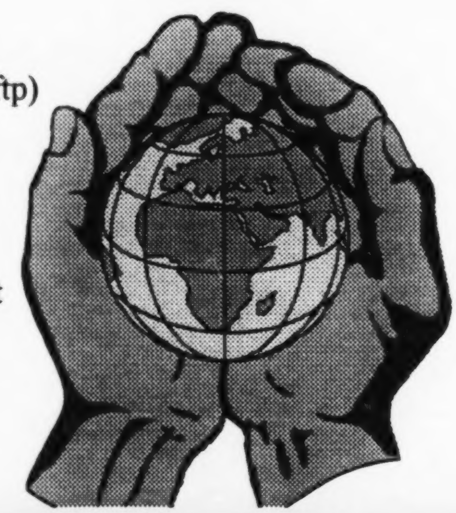
## Archie = Archive without the V

Archie allows you to search for things that are available on FTP sites. FTP sites are simply computers that are "holding tanks" of information and anyone can retrieve that information. FTP sites offer software, data, and other information that can be copied at no charge.
**Search considerations:** Exact Word Search - will only match items that have the search term in them as a whole word. Partial Word Search - will find words embedded in other words. Archie searches on the NAME of the file.

**Double click** on Internet file server (ftp) sites
**Double click** on Search FTP sites (Archie)

**Use your arrow keys** to highlight Internet file server (ftp) sites- press **Enter**
**Use your arrow keys** to highlight Search FTP sites (Archie) - press **Enter**

**Possibilities -** Interest group lists, lyrics, Supreme Court rulings, software, and documents



## WAIS Searches

WAIS = Wide Area Information Servers. WAIS searches computers that keep archived databases.

**Search considerations:** WAIS searches on what is in the file. It looks for documents which contain the words and phrases you are searching for.

**Double click** on Other Gophers and Information Servers
**Double click** on WAIS based Information

**Use your arrow keys** to highlight Other Gophers and Information Servers - press **Enter**
**Use your arrow keys** to highlight WAIS based Information - press **Enter**

**Examples** of available databases:

- Aeronautics
- Book of Mormon
- Earth science
- Lyric search of songs
- Poetry search
- Science fiction guide
- Bible
- Columbia Law Library
- Indian classical music
- Movie reviews
- Protein data bank
- Supreme court rulings
- Biology journals
- Cosmic abstracts
- Journalism periodicals
- National environmental
- Recipes

## Saving Gopher Items

When you find an item you wish to save:

**Click on File - Save file - type** the file name to save - include the B: or A:

**F10** to activate the menu line - **highlight File - Save file** and press **enter** - type the file name to save - include the B: or A:

**The best way to learn is to experiment!**

# Glossary

**Archie** - Archive without the V. Allows you to search FTP sites for a particular subject.

**Bookmark** - Allows you to keep your place in Gopher. You can remember your good "Gopher holes".

**CNIDR** - Committee for Network and Information Discovery and Retrieval

**Gopher** - Software that allows you to search the Internet by using menus.

**Internet** - Collection of computer networks in many countries. Consists of thousands of computers and millions of users.

**NREN** - National Research and Education Network.

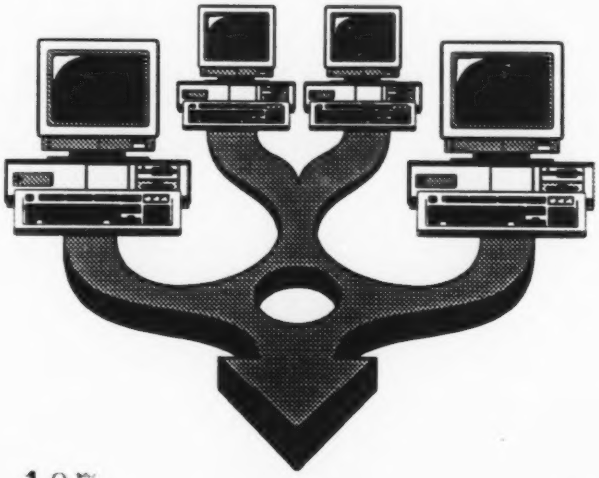
**NSFNET** - National Science Foundation Network.

**NYSERNet** - New York State Education and Research Network

**TELNET** - Software that allows you to log in to another computer at a remote site.

**Veronica** - Allows you to search for a particular subject in "Gopherspace"

**WAIS** - Wide-area information servers. System for looking up information in databases across the Internet.



# Dallas Museum of Art

**Description:** The Dallas Museum of Art is now on the Internet. It offers digital images from its permanent collection. Each image file includes not only a pictur of an artwork, but also a full text identification label and remarks. Shareware image viewers are also provided.

**Suggestions for classroom use:** Art projects, science papers, and presentations.

**Additional notes:** Start with an empty diskette because the images and software that you download are large.

## Instructions

**Connect to the Dallas Museum of Art Gopher Server:**

"Tunnel" to the Dallas Museum Gopher - can do this one of two ways:

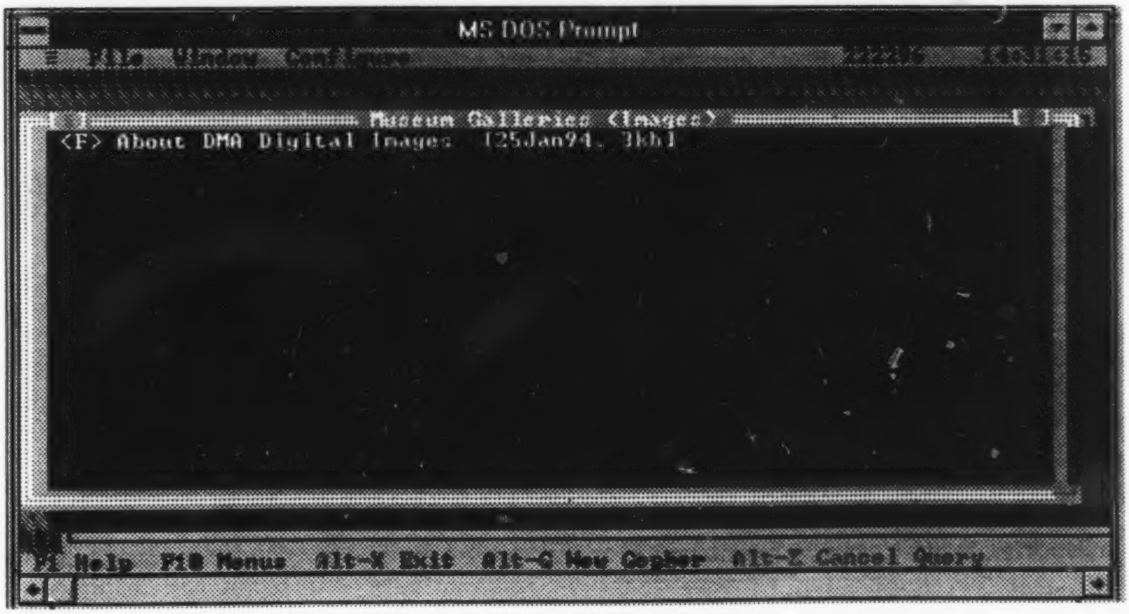
Search using Veronica for the Dallas Museum Gopher
Or find the University of North Texas Gopher
Or set your Gopher to gopher.unt.edu 70

**Download the instructions**

You should always download instructions and read them.

Choose the following menu items:

<D> Denton, Dallas & Ft. Worth Information & Resources
<D> Dallas Museum of Art - Information & Images
<D> Museum Galleries (Images)
<F> About DMA Digital Images
Download or read this file. It gives you instructions and information.



MS DOS Prompt
File Window Configure
F1 Help F10 Menus Alt-X Exit Alt-G New Gopher Alt-Z Cancel Query

```
Museum Galleries (Images)
<F> About DMA Digital Images  [25Jan94, 3kb]
```

108
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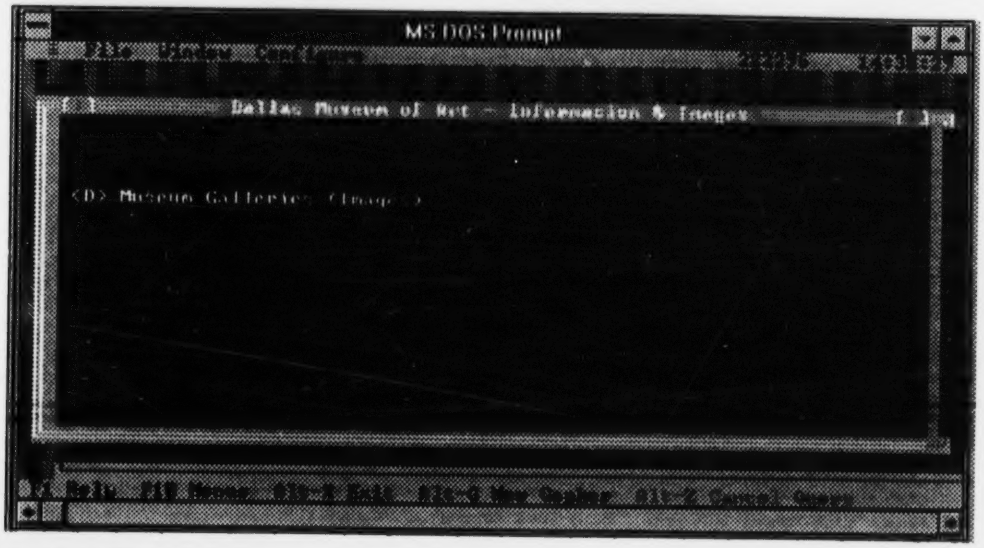
**Download the viewing software**

insert an empty diskette in the B: drive
<D> Digital Image Viewers
<B> cshowa.exe
Type B:cshow.exe to save your image viewer on your diskette
Click on OK
Gopher will tell you when you are done receiving the program

**Downloading images:**

Go back to the Museum Gallery (Images) menu
select any of the museums
select any of the images
Type B:xxxx.gif to save your image on your diskette - replace xxxx with the name of the image
    NOTE: images always need the extension .gif
Remember to always name the image file with a .gif extension.


MS DOS Prompt
Dallas Museum of Art - Information & Images
<D> Museum Galleries (Images)

**Viewing your images**

Exit Gopher - File - Exit
at the c:\menu> prompt type b: and enter
type cshow and enter
this will uncompress the software
type DIR and enter - notice the directory called cshow you now have
type cd\cshow
type cshow
highlight the .. and press enter
highlight your image and press enter
press space bar to view
press enter
press y to see comments

This image viewer can be used with any .gif files - you are ready to surf for some more exciting images!!

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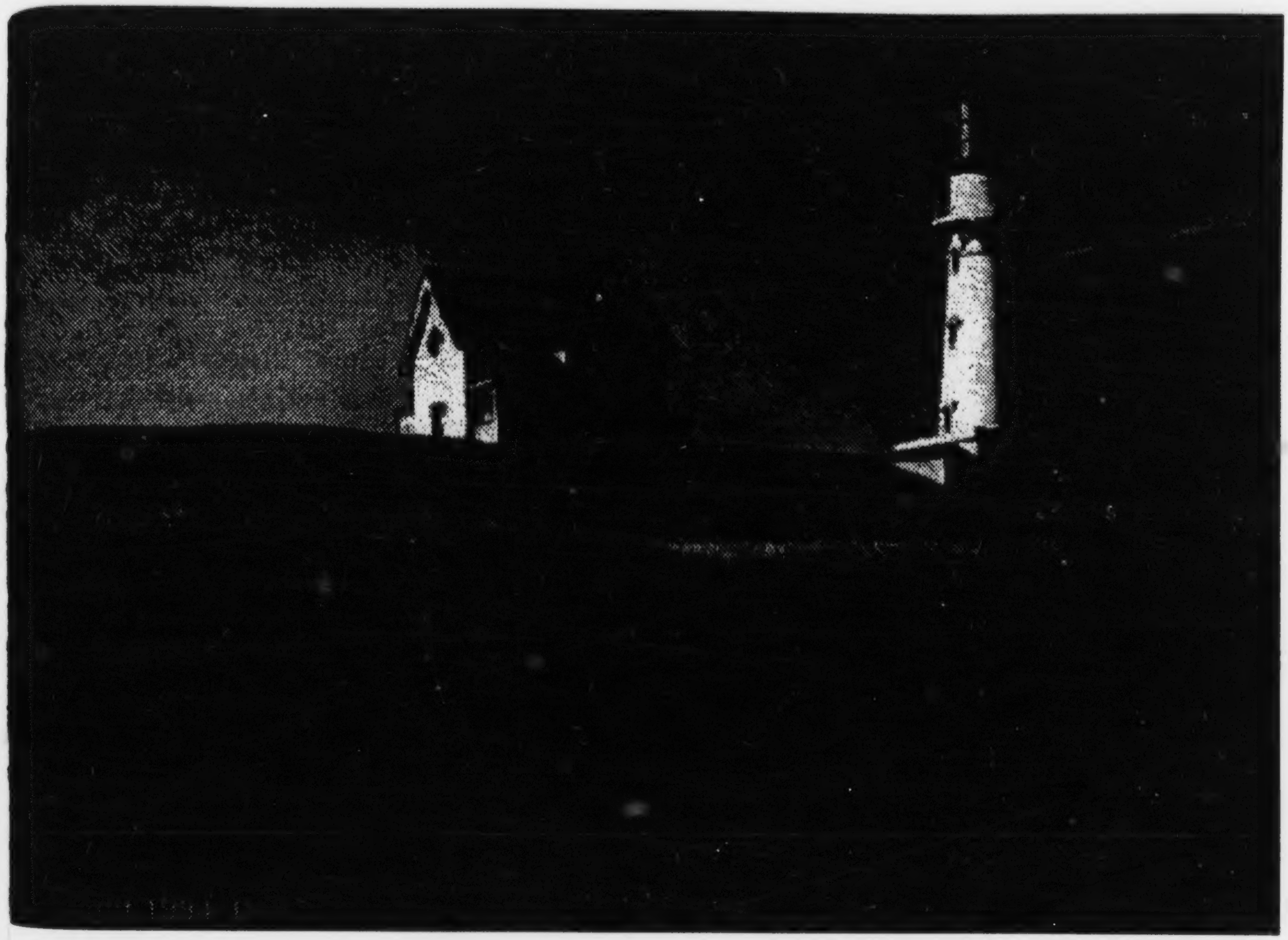
# Dallas Museum of Art



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Greece
"Black-Figure Panel Amphora"
Last quarter 6th century B.C.
ceramic
Dallas Museum of Art, Munger Fund

1965.29.M

Throughout the 6th century B.C. Greek pottery painters experimented with ways to describe reality on the curved surface of a vase. In the best examples, the urge toward description is balanced by the necessity of creating an effective two-dimensional design. For instance, this stately amphora has two panel scenes representing combats from the Trojan War. The heroic ethos attributed to the contestants in this war appears first in Homer's "Illiad", a fountainhead of Greek civilization. The amphora depicts scenes in which the Greek hero Achilles and the African Prince Memnon, who was fighting on the Trojan side, contest the body of the dead Antilochus. Combat here is frozen in a central heraldic group which maintatins the nature of the vessel in its flat pattern. To either side of the heroes are their mothers, mourning a battle which can only end in loss for one of them. The scene is both ornamental and filled with a sense of tragedy; it is purely humanistic, without any scenic distraction from the confrontation of armed warriors, one of who must die. -- From "Dallas Museum of Art, Selected Works," p.101.

One of the basic shapes of Greek pottery was the amphora, a large, two-handled vase used primarily to hold wine or oil. The panel scenes on either side of this amphora depict armed warriors fighting. The chief scene probably shows the Greek hero Achilles fighting over the dead body of Antilochus with the Trojan hero Prince Memnon. To either side stand the warriors' mothers, as mourning figures. The scene has a heraldic grandeur and a sharply pointed sense of tragic dignity.

Dallas Museum of Art, "Museum of Europe Label Text," August, 1993.

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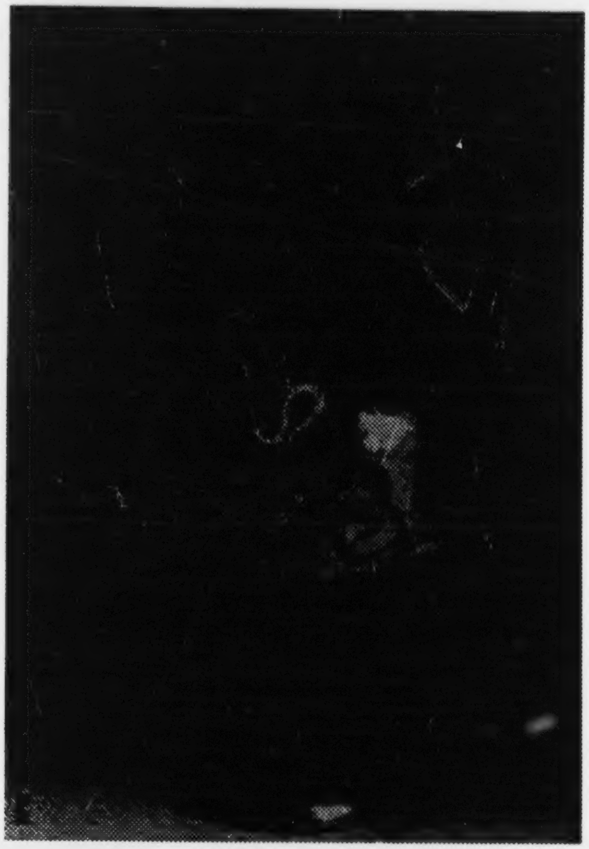
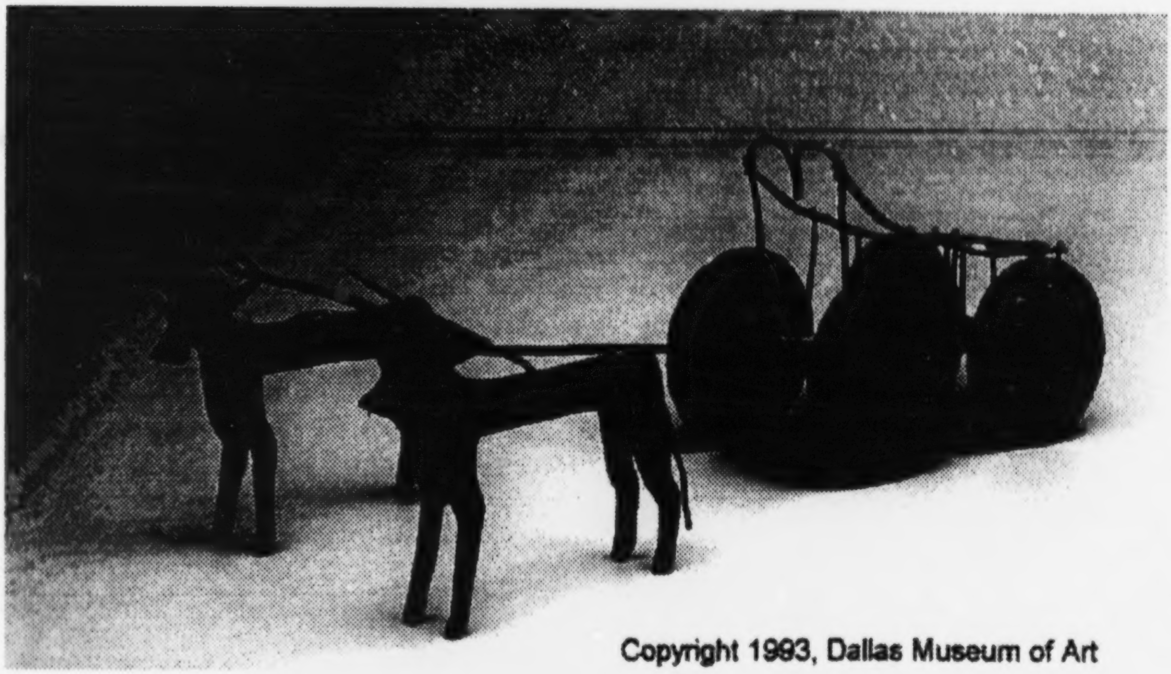
THIS FILE IS FOR PERSONAL EDUCATIONAL USE ONLY.

(Press a key) >





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# A NOTE ABOUT DMA DIGITAL IMAGES

upd 1/24/94

Thanks for visiting the Dallas Museum of Art section on the University of North Texas Gopher! We appreciate the opportunity to show you more about our Museum and its facilities. The next time you are in Dallas, please be sure to drop by for a real-time visit.

The digital images provided here are for personal educational use. They are not intended for institutional or commercial use of any kind. Please help us protect the integrity of these artworks (and this public access project!) by using them appropriately. All images bear a 1993 photographic copyright which belongs to the Dallas Museum of Art (so no, they are not in the public domain!).

All images are stored in GIF89a format, which means that in addition to the image itself, each file contains a text extension block with written comments about each piece. We have included identification information for every artwork here, and many of the pieces include an essay written by our Curators and Educational staff to help you learn more about it.

In order to view the text extension block, you have to have a viewer that supports the GIF89a format. After you download each file, be sure to rename it with the file extension 'gif.' We have provided a shareware viewer called 'CompuShow' for your convenience, but there are also other GIF89a viewers readily available. Jay Wherley's freeware utility, 'GifDesk' is a good example.

All DMA images are provided to you at 640x480x256 resolution— this is not meant to be an insult to those of you with finer display devices, it was done simply to ease the painful process of downloading images by providing a smaller size file. If you come to the Collections Information Center at the Dallas Museum of Art, I will be happy to provide students and educators free images at a fairly wonderful 512x768 rez and glorious 24 bit color (Please bring your own disks).

Please drop me a line and tell me what you think.

---

Kevin Comerford
Director of Information Technology
Dallas Museum of Art

Internet: czbb020@access.texas.gov or dma@gopher.unt.edu
Compuserve: 71233,2412 America Online: DalMuseum

# Appendix E

Module of Instruction #4

# Module #4

More searching software on the Internet

Topics: finding and transferring files, FTP, Archie

View in class: Video - experience the power: Network Technology for Educat.

Assignment:
Class activities
Internet searching for treasures
Gibbs - Chapters 4 and 6
Lathrop - part 7
Team search - 10 pts.
Collaborative classroom project with Cedar Creek Elementary in St. Francis, MN
Read your Internet mail

# Housekeeping

View Video - Experience the power

Review
- What is -
  - WAIS
  - WWW
  - Gopher
  - Veronica

# FTP

Materials
- Slides
- Instruction handout on FTP at CSS

SLIDE #1

FTP - File Transfer Protocol

Allows transferring of files between computers on the Internet

Available to FTP - text - books - software - images

Software - will cover copyrights and licenses later in the course

Anonymous FTP - computers that allow anyone to FTP and grab anything they want free - do not need password or ID

commands

| | |
|---|---|
| get filename \|more | types on screen |

SLIDE #2 - get and put

Two modes - ASCII and BINARY

ASCII - used for text files

BINARY - used to transfer programs images or other files not just text

Compressed files - reduced in size - after you retreive them you need to decompress - .zip .tar .arc

Directories and files

EXAC Demo of ftp

READ.ME files contain instructions

Instructions on FTP from CSS

# ARCHIE

Materials
    slide

Slide#3 - ARCHIE

Hundreds of thousands of files on thousands of computers - how do you find them?

ARCHIE - index of file and directory names (software, images, documents)

NOTE - relies only on names and directories

If you know the name of the file - ARCHIE can find it

If you don't know the name of the file - search on words that may relate

ARCHIE servers are busy - may not let you in.

ARCHIE is also available through gopher.

List of Archie addresses in your book

# End of Class

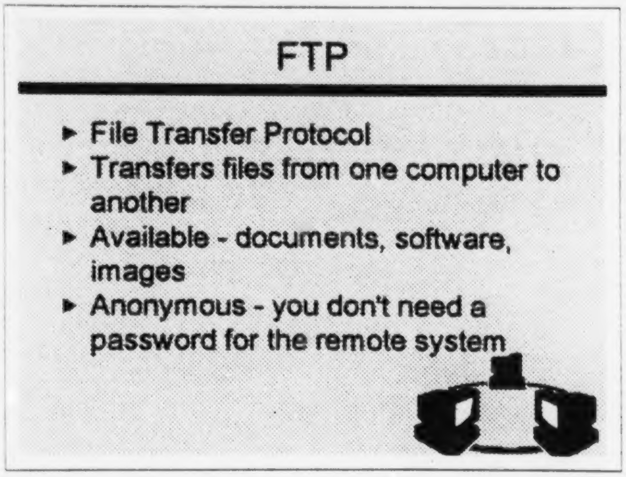
Second research article due next week

10 pt search

Internet cruise on the Mac

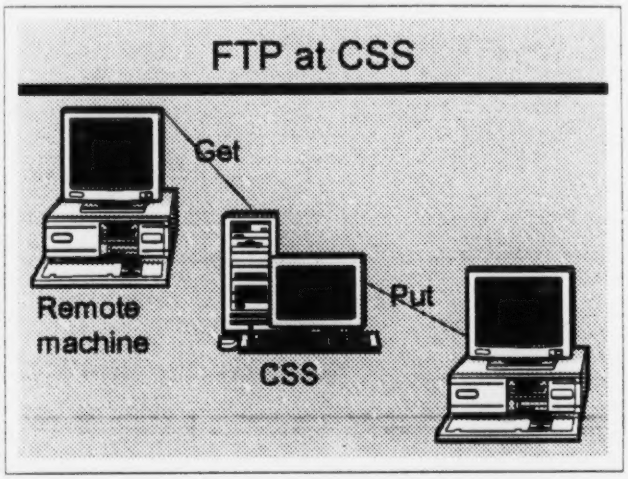
Time to play -

Start thinking about learning experineces - Use the Dallas Museum of Art and other handout as a model - Write them so everyone in the class can follow them. Sort of like a map guiding someone to a treasure.

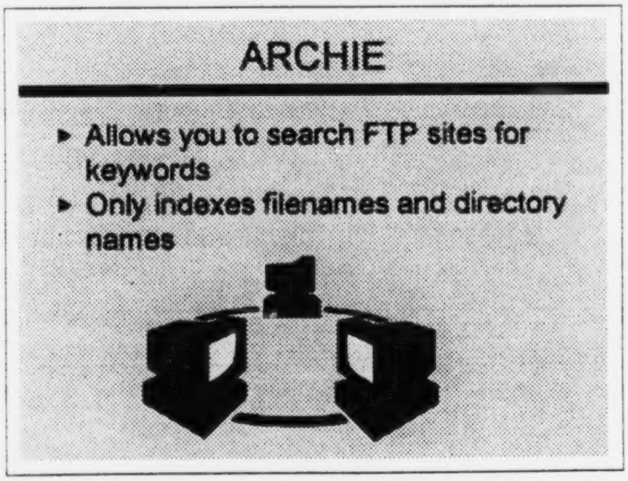


## FTP

- File Transfer Protocol
- Transfers files from one computer to another
- Available - documents, software, images
- Anonymous - you don't need a password for the remote system



## FTP at CSS



## ARCHIE

- Allows you to search FTP sites for keywords
- Only indexes filenames and directory names

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# Sample FTP Session at CSS Smithsonian Art Gallery

Purpose: To retrieve images (GIF files) from the Smithsonian Art Gallery

**Logon to the Telnet computer**

Type **ftp photo1.si.edu**

Login as **anonymous**
When asked for a password **type in your Internet address** - example djohnson@css1.css.edu

Type **cd /images/gif89a/science-nature** to change to the correct directory

**Get the file from the Smithsonian computer and put it on the Internet server at CSS**
Type **binary** to put in binary mode - this is necessary because you are transferring a non-text file

Type **get mtgoat.gif**

Type **quit** to exit FTP from the Smithsonian computer

**Put the file from the CSS Internet server to your personal PC.**
Your computer is protected so other people cannot view your files while you are in FTP. You must take this protection off to put the file from the CSS Internet server to your PC.

At the CSS1> prompt hold down the **ALT** key and press the **P** key
Use the down arrow to get to **File transfer is - Disabled**
Press the **spacebar** so it changes to enabled
Press **F1**
Hold down the **ALT** key and press the **F** key
You should now have the ftp> prompt
When it asks for your login name just press **enter**
Type **binary** to put FTP in binary mode
Type **put mtgoat.gif**
Exit ftp by typing **quit** and **enter**
Hold down the **ALT** key and press the **P** key. Use down arrow to get to **File transfer is - Enabled.** Press **spacebar** so it changes to **disabled**.
Press **F1**

The file is put on C:\telnet23 directory on your PC

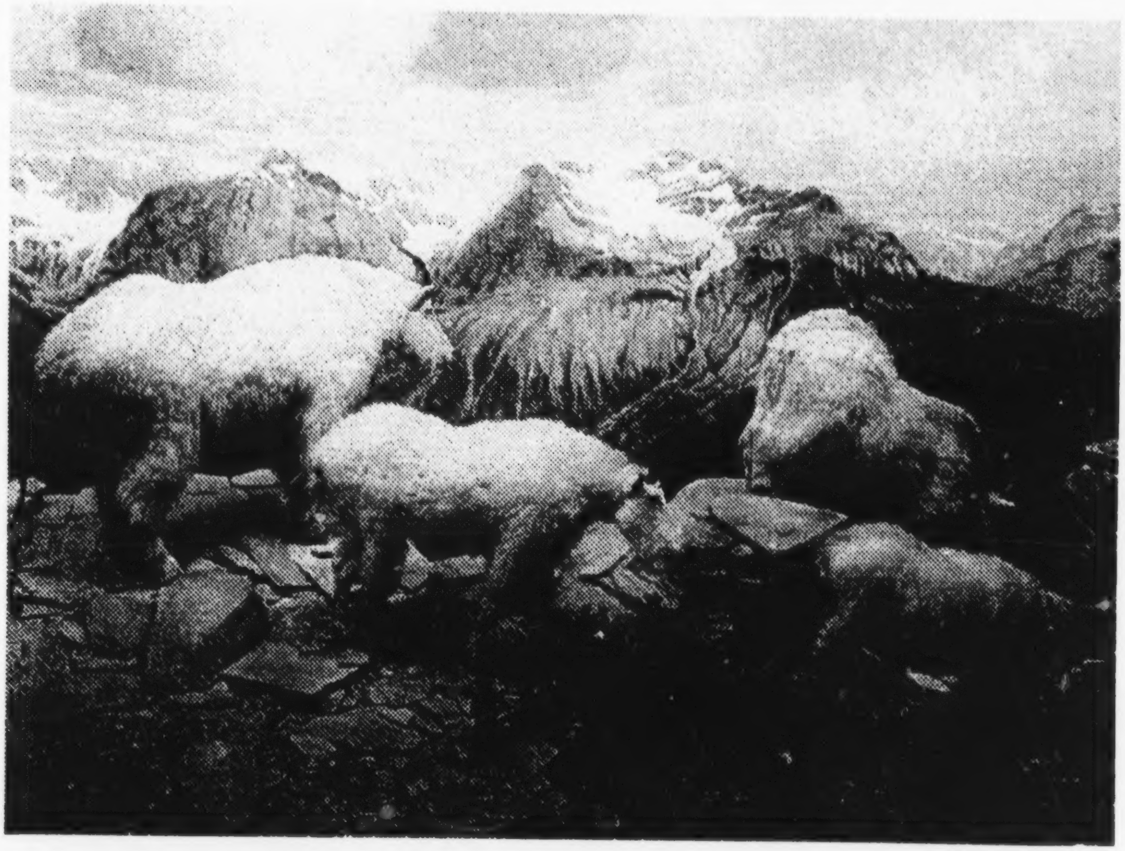
**Exit Internet**

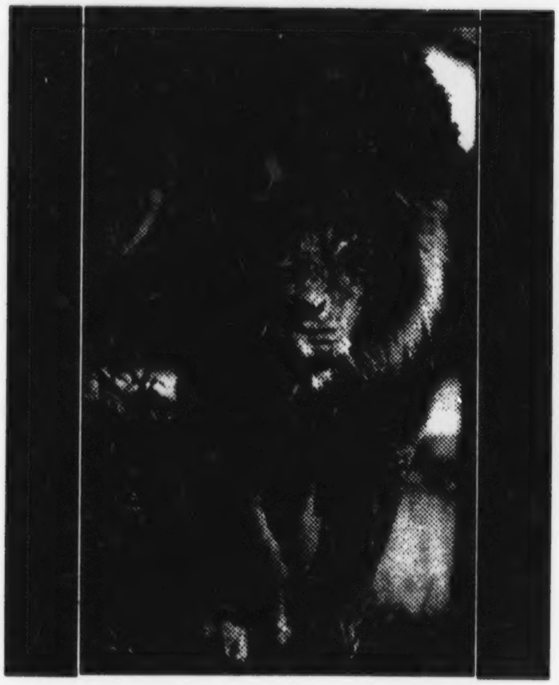
**Put the image file on your diskette**
Type **copy c:\telnet23\mtgoat.gif b:**

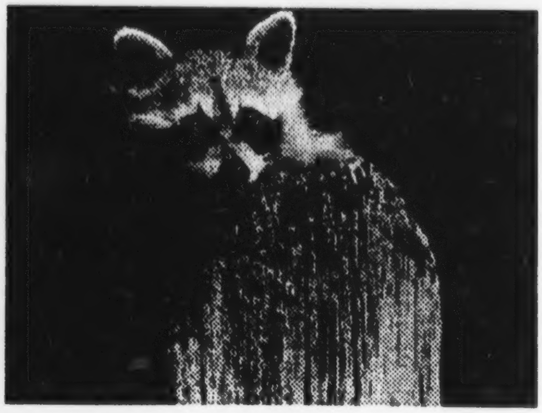
This copies the image file from your C: drive to the diskette in the B: drive

Delete the file from the C; drive - type **del c:\telnet23\mtgoat.gif**

**Viewing the image**
Type **B:** and enter to read the diskette in your B: drive
Start the image viewer by typing **b:\cshow\cshow**
**Highlight the image** you just downloaded and press **enter**
Press the **spacebar** to view
Press **enter**
Press the **Y** to view the comments
Press **ESC** twice to exit







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## PROJECT CHAPMAN

This Internet file server has been made possible through a generous grant from the Apple Library of Tomorrow Program, under Project Chapman (named for John Chapman, a.k.a. "Johnny Appleseed").

These images cover topics ranging from air and space to science, technology, history, and even current events. These images are designed to give the user who cannot come to Washington, the opportunity to see and learn about many of the Smithsonian's most popular and important objects and exhibits.

These images cover a broad spectrum of interests which we hope will interest our electronic audience. Here we are able to present photographs from many of our museums on the Mall in Washington, D.C. plus other Smithsonian bureaus such as the National Zoo and the Smithsonian Astrophysical Observatory.

Starting with some of the best of our photography, all scanning and image preparation is done in our Electronic Imaging Laboratory to insure each file meets our standards. In addition to the image, extensive captions are often included with each image as part of our mission for the "increase and diffusion of knowledge."

We hope you enjoy these images and we invite your comments.

<Smithsonian Printing & Photographic Services>
<PSDMX@SIVM.SI.EDU>

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We hope you enjoy these images and we invite your comments via E-mail to PSDMX@SIVM.SI.EDU.

ACCESS TO AND USE OF SMITHSONIAN IMAGE FILES AND DATA IS SUBJECT

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1. Q. May I put these on a file server in my school, company, museum?
A. Yes, if there's no charge for the user. All the accompanying text information (accompanying ASCII text caption files [filename].ASC, this SMITHSONIAN.RULES.TXT file, etc.) must be included, and must be presented completely and unchanged.

<< >>

2. Q. May I put these on my BBS? What if I charge a subscription fee?
A. Contact the address below first. If approved, all the accompanying text information (accompanying ASCII text caption files [filename].ASC, this SMITHSONIAN.RULES.TXT file, etc.) must be included, and must be presented completely and unchanged. If there is a subscription fee for the BBS, such a fee must be only for overall access, and not specifically for download or use of these files.

<< >>

3. Q. May I mirror these files on my Internet site in Finland or Australia because it is expensive for my users to log into photo1.si.edu?
A. See 1 & 2 above.

<< >>

4. Q. May I put these on a CD-ROM, public domain or otherwise?
A. No.

<< >>

5. Q. May I print some of these out for my report?
A. Assuming this is a non-commercial academic work, yes. This type of use is encouraged.

<< >>

6. Q. How do I obtain permission to use the files in a publication, commercially, on a CD-ROM, BBS, etc.?
A. Anyone wishing to use any of these files or images for commercial use or publication must first request and receive prior permission by contacting:

Smithsonian Institution
Office of Printing & Photographic Services
MAH CB-054
Washington, DC 20560
(PSDMX@SIVM.SI.EDU)

Permission for such use is granted on a case-by-case basis. A usage fee may be involved depending on the type and nature of the proposed use.

- - - - - - - - - - - - - - - - -

## PROJECT CHAPMAN

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<PSDMX@SIVM.SI.EDU>

# Appendix F

## Module of Instruction #5

# Module #5

Other resources on the Internet

Topics: Library catalogs, graphic images, Internet hunts, funding and grants, commercial providers, America Online, Prodigy, Compuserve.

View in class: Video - Prodigy

Assignment:
- Class activities
- Gibbs - Appendix A
- Lathrop part 8
- Second research article due - 10 pts
- Read your Internet mail - Cedar Creek Elementary
- Work on learning experiences

# Housekeeping

Read your mail
- Should be answers from Cedar Creek Elementary
- Mailed a copy of the Internet Hunt
- Read the recap of the past 4 weeks that I sent you

Collect Research Article reviews

View Video - Prodigy

Review
- FTP - Binary, ASCII
- ARCHIE
- File Compression - .ZIP .EXE PKUNZIP

## Internet Hunt, Freenets, Commercial providers, Funding and Grants

**Materials**

- Slides (copies)
- Internet Hunt - Mailed
- IBM funding booklet (copies)
- E-mail articles

SLIDE #1

**Internet Hunt**

Materials

- Mail internet hunt

Internet Hunt

- Monthly
- usually 12 questions
- people from all over the world participate
- example in your book in Appendix A

SLIDE #2

**Freenets**

- Regional bulletin board type system
- List of freenets is in your text on pages 31-32

EXAC DEMO OF FREENETS

```
telnet freenet.buffalo.edu
telnet freenet-in-a.cwru.edu
telnet freenet.hsc.colorado.edu
telnet heartland.bradley.edu
```

**Modem - how it works**

- open computer and show
- show how to plug into phone line

SLIDE #3

**Commercial providers**

- Prodigy
- American Online
- CompuServe
- Genei
- Delphi

Business News, Dow Jones stock quotes, other financial and investment information - airline reservations, games, online shopping - access to all internet

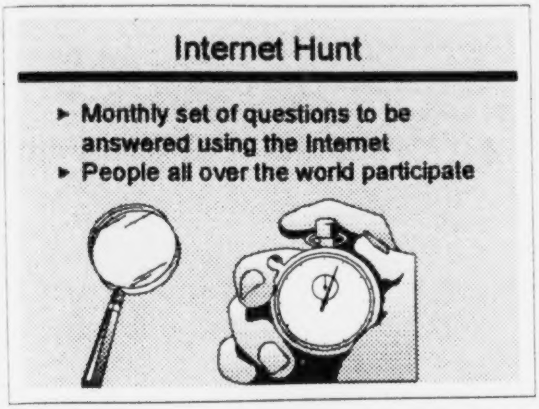
**Funding and Grant info**

IBM booklet on funding

# End of Class

Color Book Program search - 10pts
Play with Prodigy
Play with Freenets
Search for grant info on Gopher and Veronica
Time to work on learning experiences
    Reminder - don't have to "get" something - just a neat source is fine
Internet hunt - in your book or the one I sent in e-mail
Internet Cruise on the Mac

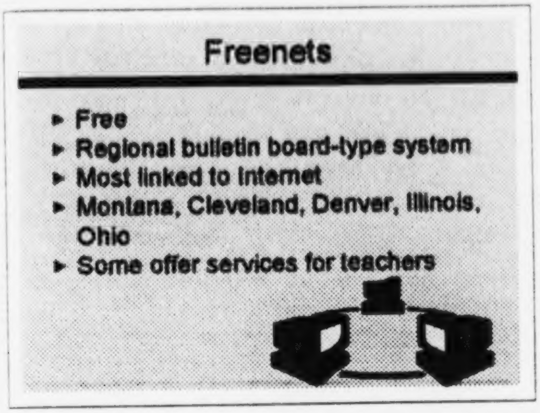
- Color Book Program Search
- Play with Prodigy
- Play with Freenets
- Use Gopher and Veronica to search for grant information
- Internet Cruise on the Macintosh
- Work on learning experiences



## Internet Hunt

- Monthly set of questions to be answered using the Internet
- People all over the world participate

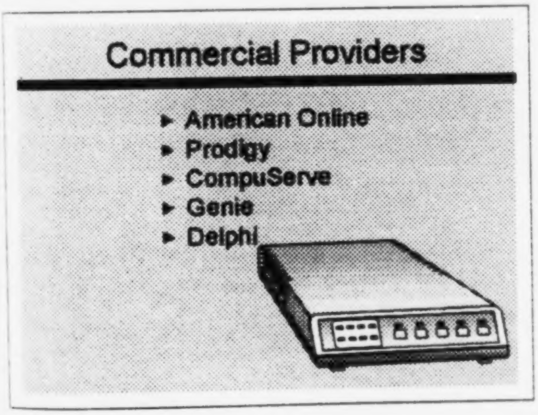
## Notes



## Freenets

- Free
- Regional bulletin board-type system
- Most linked to Internet
- Montana, Cleveland, Denver, Illinois, Ohio
- Some offer services for teachers

## Notes



## Commercial Providers

- American Online
- Prodigy
- CompuServe
- Genie
- Delphi

## Notes

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# Color Book from Gopher

**Description:** You will use FTP and Gopher to retrieve a program for elementary school children. This program is a color book for the computer. This program is compressed so you will also retrieve another program to decompress it.

**Suggestions for classroom use:** Introduce children to the mouse and the computer

**Additional notes:** May want to start with an empty diskette because the program and decompression software take up a lot of space.

## Instructions

**Connect to the MERIT Archive FTP computer**

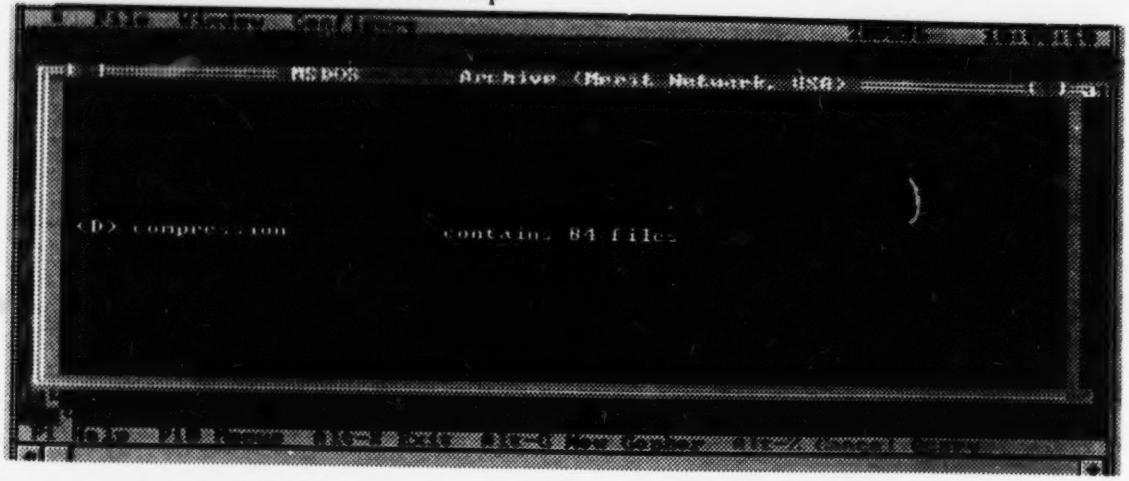
"Point" your gopher to gopher.tc.umn.edu

Choose the following menu items

<D> Internet file server (ftp) sites
<D> Popular FTP Sites via Gopher
<D> Software Archives at MERIT (University of Michigan)
<D> MSDOS Archive (Merit Network, USA)

**Download the color book program**

<D> educational
<D> tutorial
<B> colorbk.zip
save this file as b:\colorbk.zip



```
MSDOS          Archive (Merit Network, USA)

<D> compression          contains 84 files
```

**Download the decompression software:** Since the color book program has the extension .ZIP you will need a program to decompress it.

Return to the MSDOS Archive (Merit Network, USA) menu
<D> compression
<D> zip
<B> pkz204g.exe
save this file as b:\pkz204g.exe

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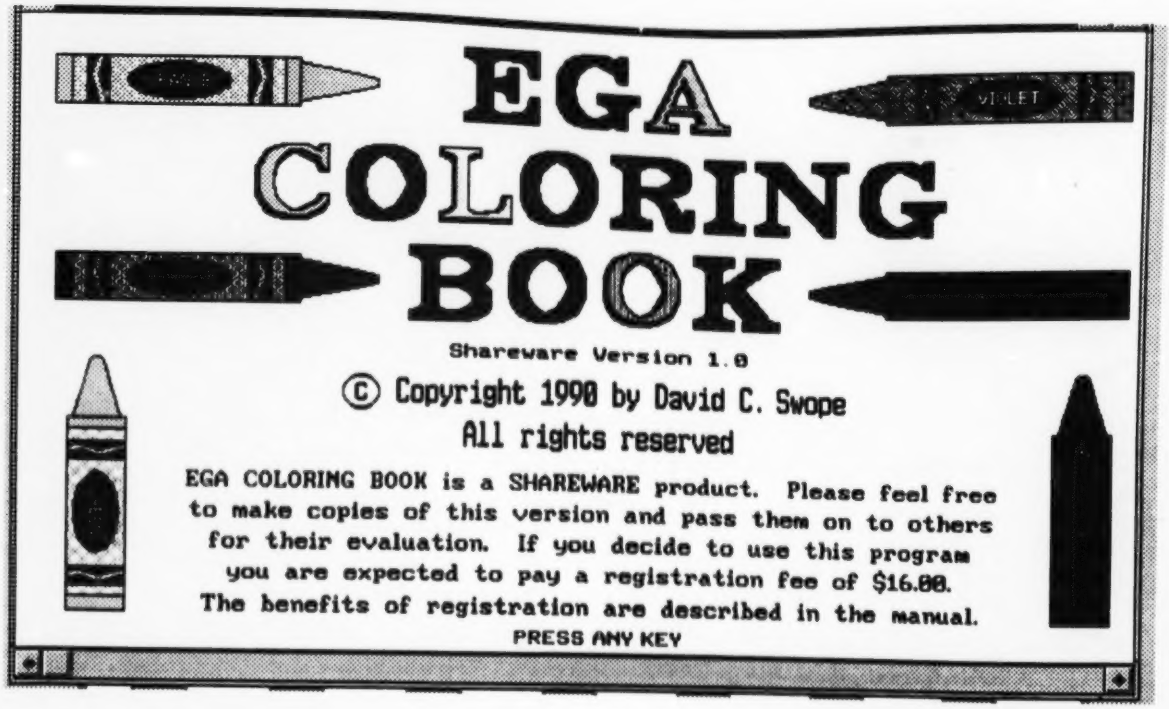
**Decompressing and using the Color Book Program:**

Exit Gopher - **File** - **Exit**
Type **b:** and **enter** to use your B: drive
Type **pkz204g** to expand the compression program
Type **pkunzip colorbk** to decompress the color book software
Type **ecb** to start the colorbook



EGA
COLORING
BOOK

Shareware Version 1.0

© Copyright 1990 by David C. Swope
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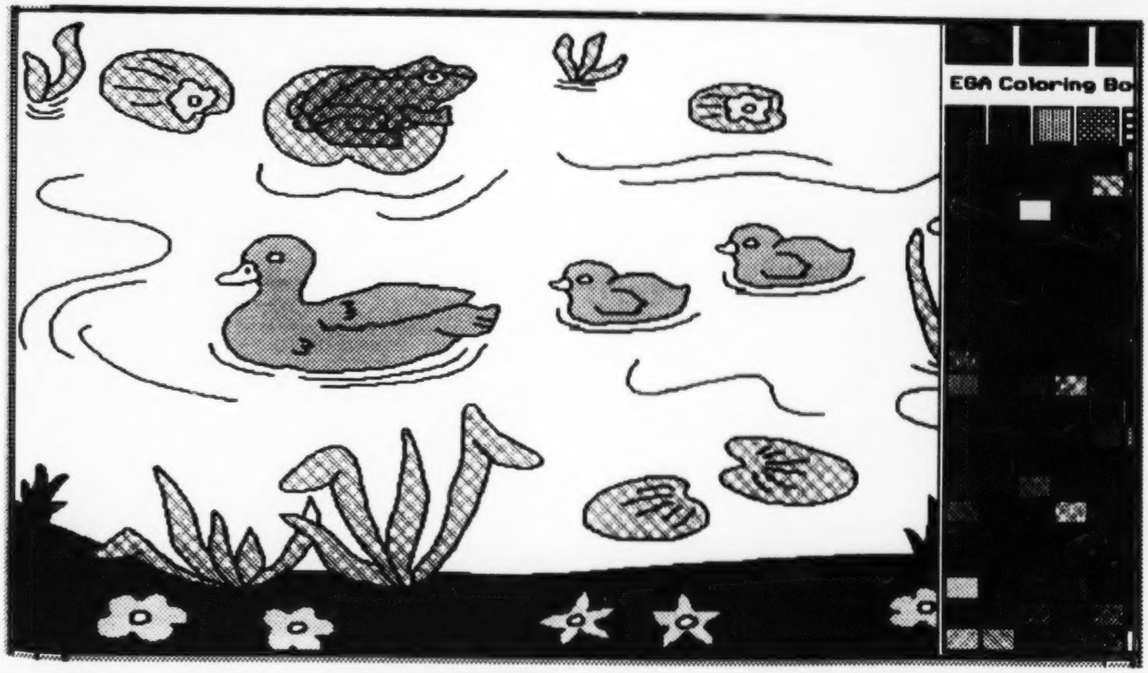
EGA COLORING BOOK is a SHAREWARE product. Please feel free to make copies of this version and pass them on to others for their evaluation. If you decide to use this program you are expected to pay a registration fee of $16.00. The benefits of registration are described in the manual.

PRESS ANY KEY



## Appendix G

### Module of Instruction #6

# Module#6

Policies and ethics on the Internet

Topics: Policies, plans, ethics, copyrights, dangers, games, MUDS
Inservicing teachers and staff

View in class: Video - Don't copy that floppy

Assignment:
- Class activities
- Gibbs - Chapter 11
- Read your Internet mail
- Work on learning experiences
  - later in quarter - Learning experience presentations

# Housekeeping

Read Mail

I sent you e-mail example of Shouting and emoticons :-)

View Video - Don't copy that floppy

Review
- Internet Hunt
- Freenets
- Commercial Providers

# Internetiquette

**Materials**

- Slides
- Policies from other schools (mailed)
- Porn article (copies)
- Shareware catalogs
- e-mail discussion on censership
- IBM - Intro to Technology in the classroom brochure (copies)

**SLIDE #1**

**Etiquette for Electronic mail**
**Shouting** - using all caps in e-mail - hard to read

Correct addressing - story in book about lady in major corporation. having a relationship with man in same organization - got in a fight. she typed up a heated email letter with very revealing things. she fumbled on the keyboard and sent it to everyone in her department.

**Quotability:** Remember anything you say can be instantly forwarded to thousands of others

**Who sent it?** - make sure it is who it said it was

**Your tone -**

**Other peoples tone** - carefully read

**Suitable content** - could be your career on the line - system operator lost his job because of religious letter - was flamed with obscene gif files

**Discretion** - don't send anything you don't want the world to read

**Flaming** - written in anger - DON'T

**Chain letters -** DON'T - waist of resources

**SLIDE #2**

**E-mail shorthand**

- Adds emotion to e-mail
- LOL - Laughing out loud
- OTF - On The Floor (laughing)

ROTFL - Rolling On The Floor Laughing

**SLIDE #3**

**E-mail Emoticons**

Page 189 in text

Characters that denote faces and expressions - read sideways

| | |
|---|---|
| :-) | Smile |
| ;-) | Wink |
| :-( | Sad |
| :-> | Smug |
| :-o | Shocked |
| :-x | lips are sealed |

**When leaving an account**

Sign off all listservs

delete any files

**Copyrights**

**SLIDE #4**

copyrights

- Public Domain - Freeware
- Shareware
- Commercial

Usually the program says the copyright on the first screen - show examples

**policies and plans**

Search retrieve and print others from the Internet

**SLIDE #5**

**dangers**

- Games
- Viruses
- Hackers
- Security

Obscene material - example - student searching for a picture of a zebra. Found a file called ZEBRA.GIF - ended up being a naked woman

Read some discussion about censership

Security - change passwords often -

There are programs that keep trying to get a password correct

What would you do if ---

## End of Class

Play a MUD - 10 pts

Search for technology plans - find and print one

America Online

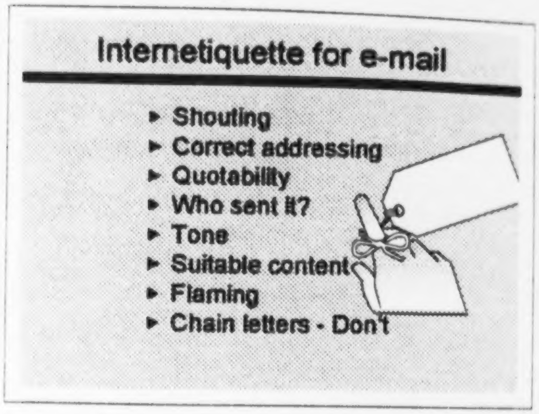
Compuserve

Delphi

- Search for technology plans using Veronica

- Prodigy

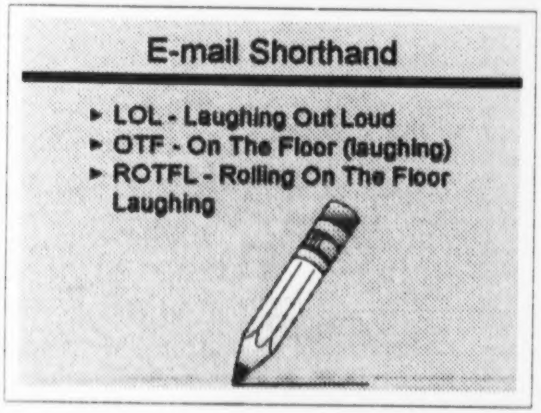
- Work on learning experiences



## Internetiquette for e-mail

- Shouting
- Correct addressing
- Quotability
- Who sent it?
- Tone
- Suitable content
- Flaming
- Chain letters - Don't

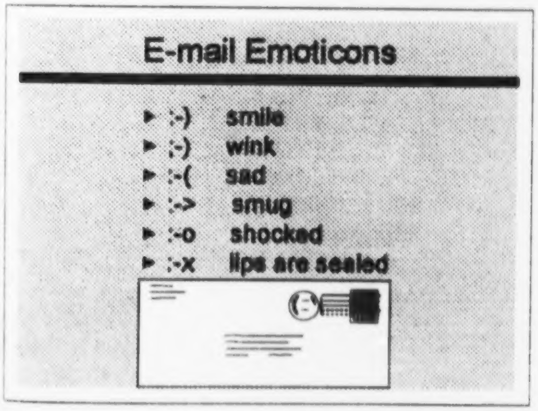
## Notes



## E-mail Shorthand

- LOL - Laughing Out Loud
- OTF - On The Floor (laughing)
- ROTFL - Rolling On The Floor Laughing

## Notes



## E-mail Emoticons

- :-) smile
- ;-) wink
- :-( sad
- :-> smug
- :-o shocked
- :-x lips are sealed

## Notes

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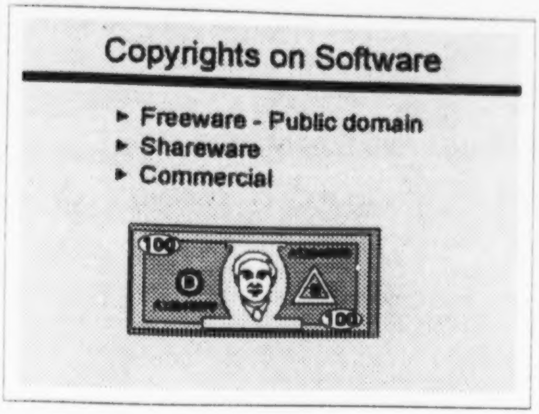
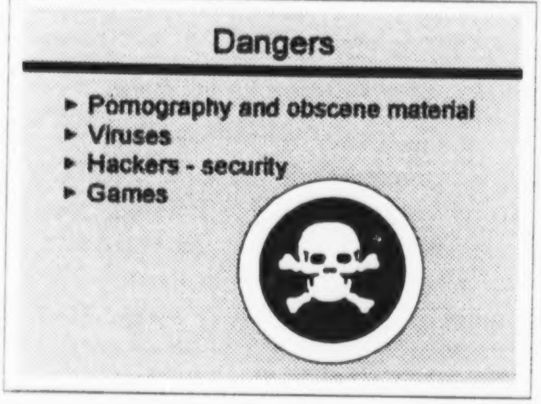


## Copyrights on Software

- Freeware - Public domain
- Shareware
- Commercial

## Notes



## Dangers

- Pornography and obscene material
- Viruses
- Hackers - security
- Games

## Notes

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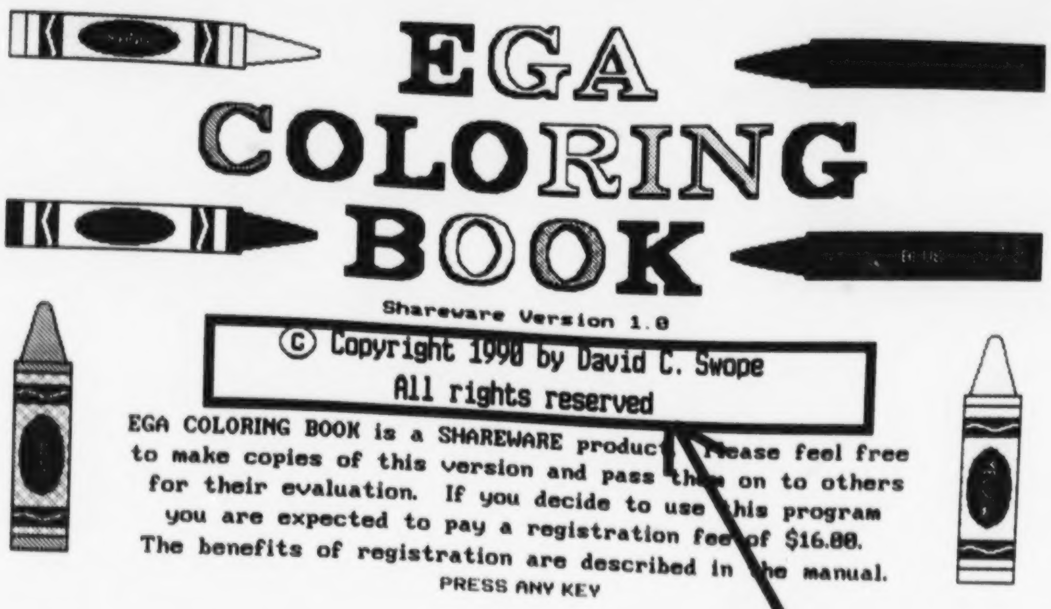


EGA COLORING BOOK

Shareware Version 1.0

© Copyright 1990 by David C. Swope
All rights reserved

EGA COLORING BOOK is a SHAREWARE product. Please feel free to make copies of this version and pass them on to others for their evaluation. If you decide to use this program you are expected to pay a registration fee of $16.00. The benefits of registration are described in the manual.

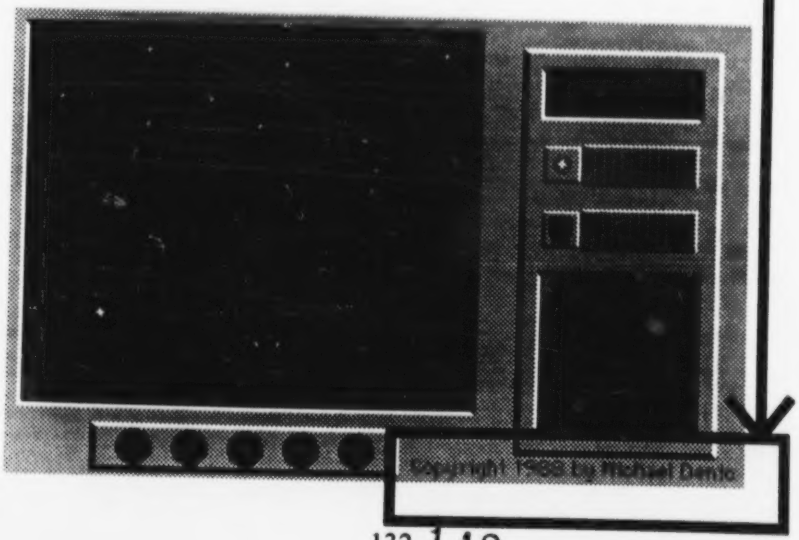
PRESS ANY KEY

**Copyright Notices**

Thank you very much for evaluating

EGA COLORING BOOK.

EGA Coloring Book is a Shareware product. Please feel free to make copies of this version and pass them on to others for their evaluation. If you decide to use this program you are expected to pay a registration fee of $16.00. The benefits of registration are explained in the manual. I hope EGA Coloring Book becomes part of your children's software library.



Copyright 1989 by Michael Denio

# *Smithsonian Art Gallery*

**Description:** The Smithsonian Art Gallery is now on the Internet. It offers artwork, photographic images, descriptions, and viewing software. The images from this gallery are free, just respect the copyright notices on the images.

**Suggestions for classroom use:** Art projects, science papers, and presentations.

**Additional notes:** May want to start with an empty diskette because the images and sofware that you download are large.

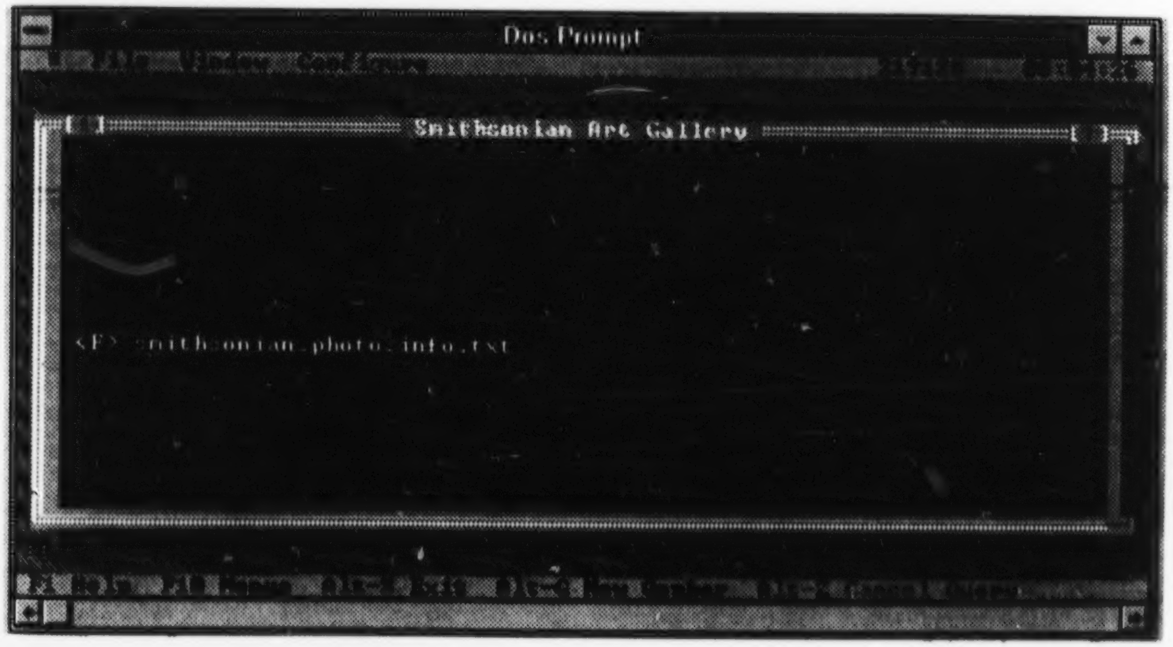
## Instructions

**Connect to the Smithsonian Art Gallery Gopher Server:**

"Tunnel" to the Smithsonian Gopher -
    Search using Veronica for the Smithsonian Gopher

**Download the instructions**

You should always download instructions and read them.
        Double click on
        <F> Smithsonian photo.info.txt
                Read



```
Smithsonian Art Gallery

<F> smithsonian_photo.info.txt
```

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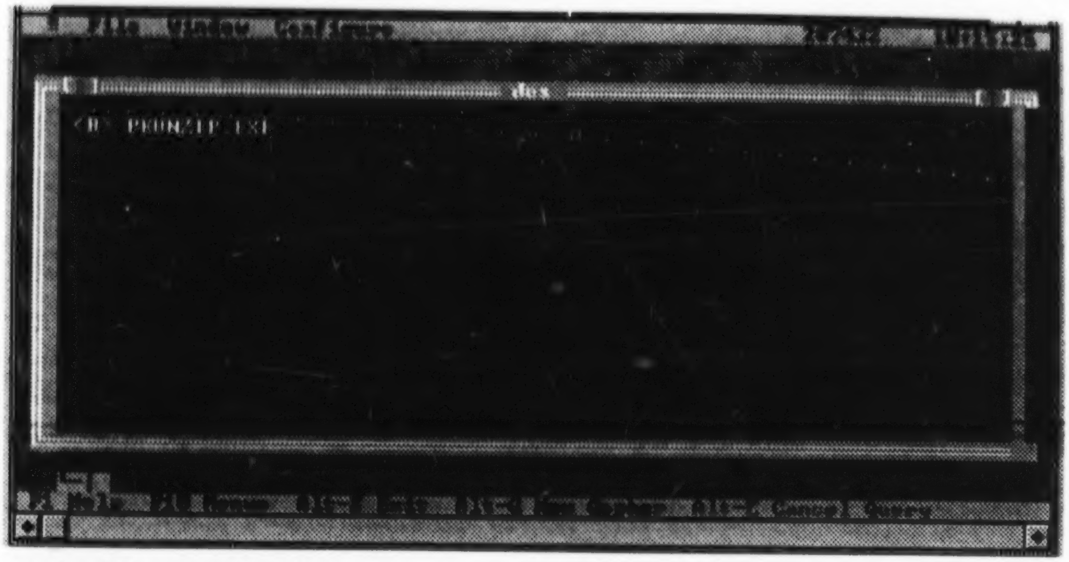
**Download the catalog so you know what is available**
Choose the following from the main menu:

<D> apps
<D> dos
<B> PKUNZIP.EXE
Download this file as b:\pkunzip.exe - This is a program that decompresses. The catalog that you will download is compressed and you will need PKUNZIP to decompress it.
Return to the Smithsonian Art Gallery main menu
<D> images
<D> catalogs
<D> dos
<B> photo1.zip
Download this file as b:\photo1.zip - Notice the .zip extension. This means the file is compressed and you will need PKUNZIP



**Download the viewing software** so you can view the images that you download. If you already have a GIF viewer you can skip this step.
Return to the Smithsonian Art Gallery main menu and choose the following:

<D> apps
<D> dos
<D> CSHOW 2000
<B> cshowa.exe
Download this file as b:\cshowa.exe. Notice the extension is .exe. This means the file is not copressed and it is ready to go.
<F> describe.txt
Read or download this file. This is the text description of the viewing program.

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**Downloading images:**

Return to the Smithsonian Art Gallery main menu and choose the following:

<D> images
<D> gif89a
Choose the subject you would like
Choose the image you would like to download
Type b:\XXXX.gif where XXXX is the name of the file.
NOTE: Always put the extension .gif on the name of the image

**Decompressing and using the image catalog:**

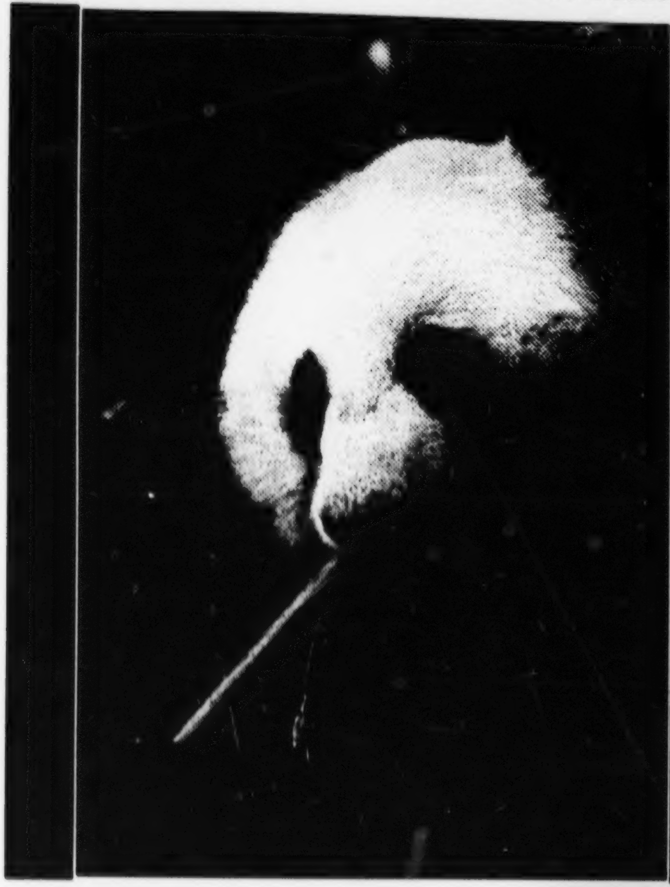
Exit Gopher - File - Exit
Type b: and enter to use your B: drive
Type pkunzip photo1.zip
This program will expand automatically into three files.
Type PHOTO1 to start the catalog program. This program allows you to search for images and gives you descriptions of all the images in the gallery. When you find an image you want: write down the library name and image name.

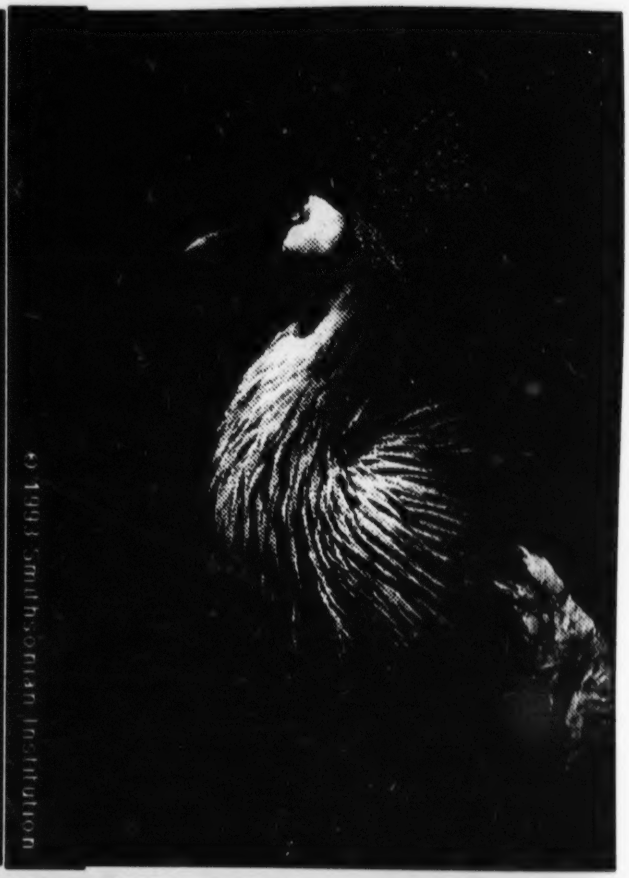
**Viewing your images**

Decompressing your viewer (only need to do once) - skip if you already have a viewer
Type B: to use your B: drive
Type CSHOWA to decompress the viewer

Viewing your images
Type cshow
Highlight the image you wish to view and press the space bar
Press enter to view
Press Y to see comments

# Smithsonian Art Gallery




© 1993 Smithsonian Institution

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